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ORIGINAL LECTURES.

A COURSE OF LECTURES ON DERMATOLOGY.

Delivered at the University of Pennsylvania during the Session of 1883–1884.

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(Reported by Henry Wile, M.D.)

LECTURE II.

ECZEMA.

ECZEMA, popularly known as *tetter*, may be defined as an acute or chronic inflammatory, non-contagious disease of the skin, characterized at its commencement by erythema, papules, vesicles, or pustules, or a combination of these lesions, accompanied by more or less infiltration and itching, terminating either in discharge with the formation of crusts, or in desquamation. The disease shows itself in such a variety of lesions as to render the construction of a proper definition a difficult matter; the definition presented above, however, embraces the essential and characteristic lesions. The lesions may be divided into primary and secondary; among the former, erythema, vesicle, papule, and pustule, or a combination of these, may be mentioned; among the latter, crust, fissure, and scale. The disease is a protean one. The subjective symptoms are burning or itching. The course of the disease may be either acute or chronic. It is more liable to relapses than any other disease of the skin, and these may occur in any variety, and to any extent.

There are four principal varieties: eczema erythematosum, eczema vesiculosum, eczema papulosum, and eczema pustulosum.

Eczema erythematosum is a distinct inflammation of the skin, characterized by an erythematous inflammatory surface, with more or less infiltration, swelling, and itching, terminating in desquamation. In this country it is a common variety of the disease, not, as a rule, acute, but having a tendency to become chronic. It remains, generally, the same from beginning to end, and does not incline to run into other varieties. Slight moisture may, at times, be present, but the lesion, as a rule, remains dry.

Eczema vesiculosum appears in the form of pin-point to pin-head sized vesicles, usually on a red base. There is no grouping, but the vesicles tend to form variously sized patches. They appear often in successive crops, forming quickly, becoming distended with a yellowish, clear fluid, and rupturing in from twelve to forty-eight hours. The development is sometimes so fast that one is scarcely able to note the disease in the vesicular stage.

Eczema papulosum is characterized by the formation of pin-head to small split-pea sized papules, discrete, confluent, or in patches, accompanied by itching or burning. The subjective symptom of itching is usually so violent that the lesions soon become scratched and excoriated.

Eczema pustulosum exists in the form of well- or ill-defined minute or small pustules, similar in their general features to the vesicles just described. It occurs most frequently in infants, children, and young persons. The common sites are the face and scalp.

There are several important sub-varieties, the chief one being *eczema rubrum*, characterized by the multiformity of the lesions, some being primary, others secondary. This form is usually the further development of one of the foregoing varieties, and presents a typical clinical picture, consisting of thickening and infiltration, with more or less redness of the surface, oozing, crusting, and scaling. The discharge soon forms into crusts, which adhere closely and often obscure the lesions. Clinically, it is a common form of the disease, lasting usually months or years, getting better and worse from time to time. *Eczema madidans*, or weeping eczema, is seen in connection with eczema vesiculosum and eczema rubrum, and is characterized by an oozing, weeping, or discharging surface.

Eczema squamosum, or scaly eczema, is also common, and is generally chronic, lasting months. The scaling, as a rule, is scanty. *Eczema fissum*, or fissured eczema, occurs mostly about the hands and feet, especially the joints. *Eczema verrucosum* is so called from the papillary or warty condition of the lesions, and generally exists as a patch.

Eczema is also divided, respecting the pathological changes and the duration of the disease, into *acute* and *chronic*. The acute form occurs especially in children, and sometimes without treatment runs its course, ending in recovery in a few weeks. The disease, however, as a rule, inclines to become chronic. The distinction between the acute and chronic forms is based rather upon the character of the pathological changes that take place than upon the duration of the attack. In the latter form the inflammation is often of a subacute type, and is accompanied by marked secondary changes.

Eczema is everywhere the commonest disease of the skin. It constitutes about forty per cent. of all skin diseases in Philadelphia. In Boston, of 5000 cases collected by White, 2242 were cases of eczema. In New York, of 8000 cases collected by Bulkley, thirty-three per cent. were cases of eczema; and in the statistics of the American Dermatological Association, there were 6179 cases out of 16,863. The disease is found in every sphere of society, among the poor and the rich; at all periods of life from infancy to old age. It is at times hereditary, and is more common in light-haired than in dark-haired subjects. In some individuals there exists an inherent peculiarity of the constitution which predisposes to eczema. Where this tendency exists, the disease is liable to be provoked by various constitutional disturbances, such as disorders of the digestive tract, chlorosis, deficient excretion, gout, pregnancy,

nervous exhaustion, and excessive mental strain. Among the local causes, cutaneous irritants, as mercury, sulphur, croton oil, tincture of arnica, dyestuffs, poison ivy, heat, friction, perspiration, alkalies, acids, soaps, and parasites may be mentioned.

It is a marked inflammatory disease, and in the acute form the changes are generally so rapid as to render their study difficult. In the chronic form there exists a chronic inflammation which it is difficult to distinguish from that found in dermatitis. The principal seat of change is in the rete and in the papillary layer of the corium. In the papular and vesicular varieties there exist respectively a circumscribed plastic infiltration and a serous exudation in and about the papillæ, the former giving rise to papules and the latter to vesicles.

The diagnostic points are, first, infiltration, swelling, and thickening of the skin; second, exudation, which is fluid in the case of a vesicle or pustule, and plastic in the case of a papule; and third, itching, which in the vast majority of cases is a distressing symptom. Eczema may be confounded with many diseases, according to the variety which is present. In the erythematous and vesicular varieties, it may be mistaken for scarlatina, especially when the eruption has appeared universally and rapidly in one or two days; also, with erysipelas, when the eruption has appeared rapidly on the face. But in regard to both of these diseases, the presence or absence of constitutional symptoms would aid in making a diagnosis. It may be also mistaken for erythema simplex, but in this affection there is absence of itching, swelling, and œdema; also, herpes, but here the lesions are always grouped, and seldom rupture, while in eczema the vesicles burst and give rise to the formation of crusts. It may easily be mistaken for tinea favosa of the scalp; where this disease has existed for some time, pustules may form, and the picture may closely simulate chronic pustular eczema. But a microscopic examination of the crusts would render a decision. The vesicular, papular, and pustular varieties may, moreover, be confounded with scabies. This, however, is a progressive disease, growing rapidly worse from week to week, and besides, it appears at first localized between the fingers, and about the genitalia and buttocks. The presence of the burrow in scabies is, of course, a positive diagnostic point. Eczema must be distinguished from artificial inflammations, as produced by various irritants, as, for example, croton oil, mercury, arnica, turpentine, etc. In these cases the history, the form of the lesions, and the course of the disease suffice to establish the diagnosis. The diagnosis between eczema and syphilis is not, as a rule, difficult. The vesicular lesion is practically not met with in the latter, while the papular lesions are attended with less inflammation than in eczema. The pustular variety of eczema is more superficial, and the removal of the crusts does not reveal an ulcerated surface, as in syphilis, but merely an excoriation. In pemphigus vulgaris the lesions are much larger than in eczema, and occur isolated; while pemphigus foliaceus, which resembles eczema, has a peculiar history and course of development. Pemphigus, moreover, in this country is exceedingly rare.

Eczema may be mistaken for seborrhœa, especially of the face; but it must be borne in mind that seborrhœa is a sluggish affection, accompanied with hyperæmia, and not with typical inflammation. The diagnosis between eczema and psoriasis is not always easy, especially where the latter disease is not marked, and the scales are wanting. However, the history and the course of the diseases are different, psoriasis being more steady, eczema more variable. The lesions in the former are sharply circumscribed, ending abruptly; while those of the latter generally fade away into the surrounding tissue.

Ringworm, occurring about the genitalia—especially the thighs—and extending up on to the abdomen, may, at times, closely resemble eczema; but in ringworm the lesions are sharply defined, and their borders are more or less marginate. In ringworm of the scalp, short, broken-off hairs may always be found, which, examined microscopically, show the fungus.

In sycosis, as distinguished from pustular eczema, the pustules will be found to spring from the follicles, and to be perforated by the hairs.

Eczema is a curable disease. The measures employed are both constitutional and local. In some cases constitutional treatment only avails. In acute cases, say of one to three weeks' standing, excellent results follow the use of saline aperients, as magnesia, sulphate of magnesium, bitartrate of potassium, sulphate of sodium, and Rochelle salt. For children, rhubarb may be specially recommended. Diuretics are also sometimes indicated, such as the acetate of potassium, the carbonate of potassium, and liquor potassæ. Alkaline mineral waters, as Carlsbad, are also useful. Tonics, as iron, quinine and arsenic, and cod-liver oil, are also valuable. A few words as to arsenic, our most valuable remedy. It should be given with discretion; and much better results are to be obtained by the exhibition of small rather than of large doses. In the majority of cases, the best results will accrue from the use of not more than two-minim doses of Fowler's solution. The use of the remedy must be kept up for some time. In a case of chronic universal eczema, occurring in a boy eight years old (one of the most obstinate cases that ever came under our notice in the University Hospital), local measures were of no avail; and the agent that effected a cure was arsenic. In certain forms of the disease, however, as in chronic eczema of the leg, where there is thickening, it is not to be relied on; but in the chronic papular variety, and in some forms of erythematous eczema, occurring in broken-down, debilitated subjects, where the nervous system is at fault, arsenic may be used with great advantage. It is indicated, as a rule, only in chronic, never, or rarely, in acute cases.

Local treatment is important and is always demanded. The variety of the disease should be taken into consideration, also the amount of surface involved, the region, duration, and the history. In the erythematous variety, usually met with about the face, much benefit may be derived from the use of lotions of carbolic and boracic acids; the former is of particular value, and may be thus used:

℞.—Acidi carbolici, ... ʒss.
Glycerinæ, ... gtt. xv.
Alcoholis, ... fʒj.
Aquæ, ... fʒiv.—M.
Sig.—Lotion. Apply several times a day.

The following lotion of prepared calamine and oxide of zinc is also recommended.

℞.—Calaminæ præparatæ, . . . ʒss.
Zinci oxidi, ... ʒss.
Glycerinæ, ... fʒss.
Aquæ calcis, ... fʒiv.—M.
Sig.—Shake before using. Apply as a lotion three or four times a day.

Or the compound sulphide of zinc lotion, made as follows:

℞.—Zinci sulphatis, .
Potassii sulphureti, . . . āā ʒss.
Aquæ rosæ, ... fʒiv.—M.
Sig.—Apply twice a day, for ten minutes each time.

In the vesicular variety, in the acute stage, excellent results will often follow the use of black wash followed immediately by oxide of zinc ointment. Oxide of zinc ointment is a valuable, mildly stimulating, drying ointment, and is useful alone and also in combination with other remedies. Of the various dusting powders, the following is one of the best:

℞.—Talci veneti, ... ʒiv.
Zinci oxidi, ... ʒj.
Amyli, ... ʒiij.—M.
Sig.—Dusting powder. Apply freely.

Salicylic acid, ten or fifteen grains to the ounce of lard, and oleate of zinc, one drachm to the ounce, do well in some cases. The calamine lotion above referred to is also valuable in the vesicular variety.

Papular eczema, as a rule, requires strong lotions. Among the best is one of carbolic acid, as follows:

℞.—Acidi carbolici, . . . ʒiss to ʒiij.
Aquæ, ... Oj.—M.
Sig.—Use as lotion several times a day.

Thymol, one to three grains to the ounce of water may also be mentioned; and liquor picis alkalinus, the formula for the latter being as follows:

℞.—Picis liquidæ, ... fʒij.
Potassæ causticæ . . . fʒj.
Aquæ, ... fʒv.—M.

This is to be used diluted with water in the strength of one drachm to two or four ounces of water. The liquor carbonis detergens, or alcoholic solution of coal-tar, will be found serviceable.

Strong sulphur ointments are also sometimes very valuable.

In the pustular variety, ointments of calomel, white precipitate, and sulphur, from one scruple to one drachm to the ounce of lard, may be recommended. In the squamous variety, tar is the most valuable remedy, and may be used in the form of the oil of cade, one or two drachms to the ounce of lard, or in the form of the officinal tar ointment, or as the liquor picis alkalinus, mentioned above. Ammoniated mercury, fifteen to forty grains to the ounce, may also be mentioned as serviceable. Where large surfaces are involved, a remedy like tar should first be tried on a small patch, to determine whether it will agree.

In eczema rubrum of the leg, the rubber bandage may frequently be used with benefit. In concluding the subject of treatment, it may be added that there is no one remedy which can be positively relied upon to effect a cure in a given case, especially where the lesions are extensive.

ORIGINAL ARTICLES.

THE EXTERNAL THERAPEUTICS OF PULMONARY CONSUMPTION.

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THERE can be no question that the beginning, the course, and the duration of pulmonary consumption are entirely limited and modified by the amount of resistance which the bodily forces are able to bring to bear in opposition to its progress. This statement is well sustained by the general well-known facts that the well-fed, the well-clothed, the well-housed, the well-developed, and the strong, possess a constant immunity from the disease; while the weak, the delicate, and the poorly nourished are constantly menaced by it, and easily fall a prey to its ravages—showing that it is a struggle between the forces inherent in the organism and those which play upon it, and that the outcome is a victory for the stronger.

Without entering here into a minute discussion of the pathology of pulmonary phthisis, or whether the immortal bacilli of Koch are a cause or a product of the disease, it may yet be safely said that both the pneumonic and tubercular forms of consumption are maladies in which the principal and most conspicuous destructive rôle is played by inflammation, either as a cause or effect. But it must not be forgotten that, while the lungs are the organs in which the most active manifestation of the disease takes place, there is no evidence to show that it is exclusively confined to these organs, and that the rest of the body does not bear a proportionate share of the disintegrating process; but, on the contrary, there is every reason to believe that the disease is constitutional as well as local; for no amount of argument can convince him who has had any thoughtful experience with the disease, that the extreme general debility, the prostration and depression of the nervous and muscular systems, the easily disturbed circulation, the shortness of breath, the clubbed finger-ends, and the hæmophilia, can be accounted for by the presence of a slight apex infiltration, or even by a partial destruction of lung-tissue—since it is too well known that there are scores of individuals who, with large portions of their pulmonary tissue excavated by previous disease, are to all intents and purposes well, and are able to perform a day's labor tolerably without much difficulty.

If, then, pulmonary consumption is a local as well as a general disease, and if its course and duration are related in inverse proportion to the amount of resistance which the bodily forces can offer to its progress, then our therapeutic line of duty lies plainly in the direction of enhancing and strengthening the forces of the body by local and constitutional means to a degree sufficient to counteract the process of disease.

In this paper I have limited myself to a discussion of the external therapeutics of pulmonary consump-

tion; not because I believe that internal medication alone in this disease is of very little permanent benefit, but because I believe that this form of treatment has never received the encouragement which it deserves, and because I think I can demonstrate by palpable evidence that its practical results are superior to any other mode of treatment yet brought before the profession. The agents which are employed are those generally known as "counter-irritants" and "massage."

I do not think that the wisdom of any person will ever be questioned if, before he undertakes to perform any kind of work, he previously endeavors to ascertain accurate knowledge of his instruments and of their actions, as well as of the material on which he expects to operate. So it is in therapeutics, if we hope to accomplish anything. We must first find out the general action of the agents which we wish to employ, as well as the general tendency of the disease which we expect to alleviate, and then, if possible, adapt the former to the latter in such a way as to obtain the desired results. I am not unmindful, however, that theorizing, especially in medicine, is under grave suspicion in some quarters, and I shall, therefore, ask permission to indulge in a discussion of the *modus operandi* of the two agents which form the basis of treatment in this paper, in the firm belief that without sound theoretical guidance our practice is blind.

The term "counter-irritant," as I have said elsewhere, is applied to various therapeutic substances, such as antimony, croton oil, cantharides, ammonia, iodine, turpentine, friction, hot poultices, etc., and is evidently out of place, for irritation is not one of their common products; and when an irritant effect is produced by them, it should never, as a rule, be transmitted to the seat of disease. It is the impulse of stimulation which they call forth, and not that of irritation, which is communicated to the cells of the body, and which invigorates and enhances their functions.

The *modus operandi* of these substances is currently believed to consist in causing accelerated action on the surface of the body, producing redness, and thus inviting the supposed superabundant blood away from the diseased organ over which they are applied. The validity of this depletory view of their action may well be questioned on the strength of various well-founded reasons, for the happy effects which we often obtain from the treatment of neuralgia by blistering, for example, cannot possibly be due to the depletion which is believed to be occasioned by the latter, for the nervous structures in nearly all cases of neuralgia are already in an anæmic state. Again, take eczema, or some other form of cutaneous inflammation; and where, let me ask, is the medical practitioner who has not witnessed a disappearance of the redness and inflammation, and a healthy color of the skin substituted under the benign influence of a poultice. Here the supposed counter-irritant is brought in direct contact with an inflamed portion of the skin; and if it were true that this agent relieves the disease by simply inviting a larger amount of blood to its immediate vicinity, then it should occur in this instance; but instead of this, the part becomes blanched and pale, and the inflammation disappears. Nor can any one reasonably expect to derive any benefit whatever from the employment of these external remedies in the treatment of pulmonary phthisis on the score of depletion, especially not after the disease has reached its second stage. For caseous masses, no matter whether resulting from the tubercular or inflammatory infiltration, are already in a semi-isolated condition, if not entirely cut off from all vascular communication, and hence disintegrate and die. The pressing indication here is provision for a more copious and abundant blood supply to nourish the famishing and fast-starving tissues, and plainly not for still greater depletion; indeed, the presence and absence of blood supply in the lungs in phthisis are important elements in the history of the disease, and must be taken into consideration in its treatment; for, it is a fact that persons suffering from mitral disease, and whose lungs are therefore in a more or less constant hyperæmic condition, rarely die from phthisis. To this aspect of the treatment I shall revert further on.

A rational inquiry for a principle which underlies the physiological action of these external remedies, will show us that they have at least one general law pervading their action, and that is an increase of molecular and cellular motion. They all conform to this law, and though they act with different intensity, their action yet differs chiefly in degree, and not in kind—in quantity, and not in quality. But it may be said that most all disease, and especially inflammation, is a process of increased molecular activity, and why prescribe an agent which tends to the same end, and thus increase the trouble instead of lessening it? We must recollect, however, that all disease is a process of disintegration, and inclines to diffuse and radiate until met and counteracted by healthy molecular motion, and that these *external stimulants*, as I shall term them in this paper, control disease, not by acting so much upon the disease centre itself, as by influencing and strengthening the more or less healthy tissues which surround the disease.

To make this clear I shall state that all motion, whether massive or molecular, takes place in the line of least resistance, and if the resistance is less on the side of health than it is on that of disease, then diseased motion will spread, *vice versa;* and if there is not sufficient force present in the body to resist and counterbalance the progress of disease, then death must follow. This resisting power varies in different individuals, and in the same individual at different periods, and it is well exemplified in the processes of mortification and gangrene. The line of demarcation, which is the battle-line between morbid and healthy action, may be fixing itself in a certain locality, and the strength of the patient, from some incidental cause, may be suddenly depressed still further, thus diminishing the resistance of the body and allowing the line to settle still closer to the centre of the body. The same conflict between healthy and diseased action is also well seen in chronic ulcers, where the line between health and disease advances and recedes, making the

ulcer appear large at one time and small at another, in direct correspondence with the strength of the patient and of the part; and it is a noted fact that the line of treatment which is pursued by all rational practitioners in these ulcers is that of endeavoring to maintain or enhance the resisting power of the patient by various means, prominent among which are the external stimulants. In threatened invasion of mortification or of gangrene, the early application of a warm poultice will often avert the danger, or at least tend to circumscribe and limit it to a smaller area than if left to its own unrestricted course. In lacerated and contused wounds, such as are usually produced by heavy machinery, there is often a disposition towards coldness, and with but little tendency to react; here the persistent application of a warm poultice will frequently restore the injured parts to a more healthy state.

Now, if the intensity of the inflammatory process were represented by a shaded line, the darkest color or shade would represent the centre of inflammation —the seat of greatest activity; next would be a shaded circle of lighter color; the next circle would be a shade lighter, and so on, until finally the color would fade into the light hue of health. It is evident, therefore, that there are many grades of activity between health and disease; that the former fades imperceptibly into the latter, and the latter imperceptibly into the former; and that there are grades which are neither constantly the one nor the other, but oscillate between the two. So from all the data which have been embodied in this paper thus far, I think it will appear obvious that through the agency of these *external stimulants* we can shift the battle-line between health and disease; or, in other words, that we can through them not only deflect disease and diffuse healthy action into regions which were previously invaded by disease, by enhancing molecular and cellular activity in the surroundings of inflammatory action, but also remove the products of inflammatory action, and so prevent the spread of disease and also eradicate it.

Care must be exercised in the selection of the proper stimulant, for it is a very easy matter to generate more excitement on the surface than is necessary, and thus aggravate rather than benefit the disease. This appertains especially to the different forms of inflammation. As a rule, the more recent the disease, other things equal, the easier it is influenced and its progress checked; hence, the milder external stimulants, such as mustard, turpentine, ammonia, friction, poultices, etc., must be applied; but in the well-settled or chronic form, the most active measures, such as blisters, croton oil, and other agents are indicated.

From a considerable experience in the treatment of chronic lung troubles, I became convinced some time ago that none of the external stimulants then in current use were sufficiently powerful to modify or ameliorate the more chronic and persistent hereditary forms of pulmonary phthisis, and I have designed a rubber apparatus[1] for the chest in the shape of a double jacket, into which steam is forced through rubber tubing from a boiler on a neighboring stove. I partly failed in my object then, because the rubber yielded too readily to the disintegrating effects of steam; but the clinical results which I obtained from its limited use satisfied me that further efforts in seeking suitable material for the construction of such an apparatus would be well worth a trial. So I had lately made, by Messrs. Tiemann & Co., of New York, a steam jacket of tin metal, which, from a somewhat protracted use, seems to fulfil all the ends I had originally in view. The inside surface of the jacket is covered by a lining, an inch in thickness, composed of cotton wadding, covered with several thicknesses of flannel. This lining is moistened with water and heated before the jacket is adjusted to the chest. Thus arranged, it will be observed that it strictly fills all the requirements of a strong and powerful external stimulant, and, while its action is the same in kind to that of a hot flaxseed poultice, only a great deal stronger, it possesses many prominent advantages over ordinary poultices and other appliances previously employed. It envelops the whole chest completely. It is light and readily adjusted. It retains its position on the chest without difficulty. It is easily managed and operated. It maintains a constant and uniform temperature. It requires no renewal every hour.

The patients are allowed to remain in the steam-jacket for a varying period, from two to five hours each day. The steaming, besides causing an intense thirst, also calls forth a copious perspiration, and, as a precautionary measure against a too sudden change in the bodily temperature, the patients are advised to dress dry and go to bed, cover up well immediately after the jacket is taken off, and to remain there until sufficiently cooled off. The thirst is so great that a patient frequently drinks from two to three quarts of milk, or of milk and water, during three hours' steaming. Whether the moisture which is applied externally to the body under such a high temperature is absorbed by the circulation, is rendered probable by physiological experiment; but it is certain that the large amount of liquid which patients take by the mouth cannot fail to promote molecular and cellular metamorphosis in the tissues of the lungs, surrounding the centres of disease, under the intense stimulation which is superinduced by the steam-jacket.

Last winter, I witnessed a series of very interesting experiments on the physiological effects of massage, which were made by Dr. Zabludowski, under the direction of my friend and teacher, Prof. Kronecker, in the Physiological Laboratory of the Berlin University, where I was engaged in physiological work at the same time. The results of his experiments, which were since published in the *Centralblatt für die medizinischen Wissenschaften*, No. 14, convinced me that massage had a tonic and invigorating influence upon the animal body; and during my attendance, last spring, at the Brompton Hospital for Consumption, in London, I related the result of those experiments to Dr. Bruce, of the hospital staff, and he concurred with me in the belief that bodily massage, by arousing the consti-

[1] See New York Medical Journal, October, 1879.

tutional lethargy present in phthisis, might probably be a valuable adjunct in its treatment. Since my return, I have had opportunities to test the efficacy of massage in a clinical way, and, while it is inferior in its beneficial effects to the steam-jacket, it has certainly proved itself to be a most useful addition to the external therapeutics of pulmonary consumption.

The following is a condensed record of the cases which have been treated by this form of external stimulation and massage. Although most of the cases have been under daily observation, and a careful record of the temperature, symptoms, and physical signs was kept in all cases but one, in which it was impossible to obtain accurate temperature observation, on account of the unlettered condition of the patient and his family, I shall only relate the most salient points in their history and progress. Case I. was treated by the rubber jacket alone. Case II. was first treated with poultices, etc., and finally by the rubber jacket. Case III. by poultices alone. Cases IV., V., and VI. by poultices and massage. Cases VII. and VIII. by poultices and massage for a while unsuccessfully, and then with tin steam-jacket alone. Case IX. by steam-jacket alone. It is but fair to state that, while the external treatment was in progress, nearly all the patients took cod-liver oil, and all of them meat-juice, milk, and the most nutritious diet they could afford. Tubercle bacilli were found in Cases IV., V., VI., VII., and IX.

CASE I.—D., aged eighteen years, became my patient on May 6, 1879. Coughed since previous August; had a copious expectoration, first green, then streaked with blood; had hæmoptysis two months before; also subject to chills and night-sweats; lost in flesh; appetite poor; bowels and menses regular; and had clubbed finger-ends. No trace of hereditary disease in family history.

Physical Signs. — Diminished resonance over whole of left lung; crepitation at apex, and rough respiratory sound towards the base. Right side normal.

Treatment.—Applied the original rubber steam-jacket on May 8, and she used it almost daily until June 17. Under its action she improved in cough, expectoration, chills, night-sweats, appetite, etc., and on the day the steaming was discontinued the physical examination showed that the diminished resonance and crepitation had vanished, and were replaced by a rather harsh vesicular murmur. When last heard from, about a year ago, she was doing well. This case, in the rapid amelioration of the physical signs, is analogous to Case IV.

CASE II.—S., married, aged forty-five, came under my care, March, 1879, in the following condition: Sleeps poorly, coughs constantly, expectorates profusely, color of which is yellowish-gray; has night-sweats, chills, poor appetite, coated tongue; bowels irregular, and is losing flesh. One brother died of consumption; rest of his family exempt from phthisis.

Physical Signs.—Left side: dulness, crepitation and bronchial respiration in upper two-thirds, crepitation specially audible in middle third behind. Right side normal.

Treatment.—Until May 21, 1879, he was treated with poultices, cod-liver oil, etc., with little or no success, and from this time on to June 25 he used the rubber steam-jacket. Under this form of stimulation his cough, expectoration, chills, and night-sweats, gradually diminished, his appetite and sleep returned, and on June 26 the steaming was discontinued, and a physical examination showed that the dulness and crepitation were replaced by a somewhat harsh vesicular murmur in the upper third of left lung, and a cavity of the size of an egg in the middle third behind. At present writing (February 4, 1884), the cavity is somewhat shrunken, and he still has a cough, but is strong and fleshy, and well able to work every day.

CASE III.—K., aged nineteen, single, I first saw November 24, 1880. Coughed for a month, had yellow expectoration streaked with blood, stitches in left apex, night-sweats, lost flesh, poor appetite, vomited his food, and had clubbed finger-ends. Lost a brother the previous year, probably with phthisis.

Physical Signs.—Left side: diminished resonance, crepitation and wavy respiration from apex to third rib. Puerile respiration over remainder of lung. Right side normal.

Treatment.—Flaxseed poultices over left shoulder, meat-juice, cod-liver oil, and nourishing food as well as some hypophosphite of lime.

January 10.—Feels good, and physical signs as well as symptoms markedly improved; poultices discontinued. He then moved out of my field, but from last accounts (October 13, 1883), he was well and got married some time before.

CASE IV.—D., single, aged twenty, I began to treat July 19, 1883. She had a cough for a year, chills, lost flesh, poor appetite, and sleeplessness, never expectorated blood. Weight 100½ pounds. Her father's mother and sister, and her mother's sister died of consumption. She lost a brother at the age of eighteen from some form of lung trouble.

Physical Signs.—Dulness over left apex, chiefly over its posterior aspect, and crepitation over same region. Right side normal.

Treatment.—Flaxseed poultices over upper portion of left lung, and massage of the whole body twice a day.

September 7.—Dulness over left apex almost entirely gone, no crepitation anywhere, and is replaced by a weak, but otherwise normal, respiratory sound. Her symptoms are also very much improved. She weighs 109 pounds. Discontinued poultices and substituted iodine ointment. When last heard from (last December), she was doing well.

CASE V.—P., aged four and a half years, came in my hands in the beginning of last July, when he was suffering from catarrhal-pneumonic phthisis of the left lung. Cavity-formation was then going on in apex, cavernous râles in middle, and complete dulness and absence of respiratory sound in lower third of left lung, anteriorly, posteriorly, and laterally. Right lung normal, except hyper-resonant. Tubercle bacilli were found in large numbers. Weight of patient, 30½ pounds. A brother of the boy's father died from phthisis about ten years before.

Treatment.—Flaxseed poultices and two bodily massages every day.

July 19.—Same treatment. Mucous râles found on right side posteriorly, extending from apex along spine to base. Left side about the same as at last examination, although the patient seemed better in some respects.

August 8.—He suddenly spat up about half a pint of yellow, purulent fluid, which evidently came from an abscess in left lung, towards its base, where the absolute dulness existed, for a physical examination disclosed an extension of the cavity. Mucous or moist râles persist at base of right lung; none any longer at apex.

18th.—Same treatment. Moist râles at base gone.

24th.—Very few tubercle bacilli found in sputum. Discontinued poultices and massage, and applied iodine ointment to chest.

Physical Signs (26th).—Left side, cavity extending from first to sixth rib, anteriorly, and posteriorly to angle of scapula. Considerable retraction at apex. Very few moist râles at base; otherwise, respiratory sound is restored, though diminished in force. Right side normal, except hyper-resonant. Weight, 35 pounds. December 13, doing well. Weight, 40 pounds. At present doing well.

CASE VI.—August 4, 1883. G., married three years; aged twenty-eight years, and mother of two children. Has had a cough since she had measles, when three years old; cough aggravated since she married, and she became very much worse after both her confinements. Had copious hæmoptysis last March, losing about one quart of blood, and has lost flesh rapidly ever since. Present weight, 102½ pounds; a week ago, she weighed half a pound more. No family history of consumption on either her father or her mother's side. Her brothers and sisters are all well.

Physical Signs. — Right side depressed and sunken from clavicle to mammary region; tympanitic sound over this region; cavernous râles at base. Left side resonant on percussion over the whole extent; coarse mucous râles posteriorly at base and interscapular region.

Treatment.—Flaxseed poultices over whole chest, massage twice a day, cod-liver oil and meat-juice. After a week's treatment she began to mend, and on September 27 the poultices and massage were discontinued. She was very much improved in every respect, and presented the following physical signs: Right side: small cavity at base anteriorly, no râles anywhere. Left side: few bronchial râles at base, and cavity in interscapular region. She sleeps well, coughs very little, her expectoration now is mucous instead of greenish-gray; has good appetite, and weighs 111½ pounds.

December 7.—Still doing well; her cough persists in a mild form, and she weighs 114 pounds.

30th.—Is able to do her own housework.

CASE VII.—I began to attend B., aged thirty, married, on September 30, 1883. Has been ill since last June, when he was taken with a severe chill. Coughs a great deal; has a green expectoration, night-sweats, loses flesh, poor appetite, irregular bowels, clubbed finger-ends; frequently spits blood, and to-day he had a very profuse hemorrhage from his lungs—probably lost over one pint of blood. Lost one brother from consumption.

Physical Signs.—Left side: Tympanitic sound over apex, extending to angle of scapula behind, and in front to third rib, with slight dulness extending for a few inches below these points; cavernous sounds from apex to third rib in front, and to angle of scapula behind, with some moist and crepitant sounds below this; base normal. Right side: Respiratory sounds normal, except prolongation of expiratory sound at apex. Weight, 133 pounds. Tubercle bacilli abundant.

Treatment.—Flaxseed poultices over whole chest, and massage twice a day; meat-juice, milk, cod-liver oil, and a nutritious diet. He began to improve, not only in his symptoms, but the physical signs also mended considerably.

On October 21st there were very few moist râles audible anywhere in his whole chest; but on October 22d another examination showed that tubular breathing and moist râles were developing themselves in lower half of left lung behind. On October 24th ceased to poultice, and applied croton-oil liniment over whole chest and continued massage. I now made arrangements with Messrs. Tiemann & Co. to construct a tin-metal steam-jacket for him. On account of several unavoidable delays in the manufacture of the jacket, I did not get it until November 20th, when the disease had also extended to the right apex, and formed a small cavity there. The physical signs at this time were the following. Left side, anterior: Cavity extending to fourth rib, tubular breathing and moist râles from here to base. Posterior: Cavity to angle of scapula; from here to base, tubular breathing and some moist râles. Right side, anterior: Small cavity extending to right intercostal space, below this normal. Posterior: Cavity small in apex; rough breathing at angle of scapula, below this to base some moist, but chiefly normal, sounds. I now omitted the massage, and began the use of the steam-jacket. He began to improve, as was well shown by the amelioration in his symptoms and physical condition. On January 18, 1884, I took off the steam-jacket. He had very little cough and expectoration; no chills nor night-sweats, and presented the following physical signs. Left side, anterior: No moist râles; base clear also laterally. Posterior: No moist sounds except a few clicks over cavity; respiratory sounds normal from cavity to base. Right side: Normal over whole lung except small cavity in apex.

Feb. 1.—Very few tubercle bacilli in sputum. It is unnecessary to point out that the condition of this patient was well-nigh desperate when the steam-jacket was applied, and whether he will fully recover his health (although at present writing he is still improving weighs 136½ pounds) the future alone can determine. The results in this case are certainly very interesting, when we reflect that the whole course of treatment was carried out under the most unfavorable hygienic surroundings—in one room, where most of the cooking, the heating, the eating, and most of the sleeping of a family of seven

members were done; and that during a most rigorous winter. His temperature, which ranged from 100½° in the morning to 103° in the evening, when I first took him in charge, has seldom varied more during the past month than from 98½° in the morning to 99½° in the evening.

CASE VIII.—K., aged forty, married, came under my care August 1, 1883. Received an injury to his left side about seven months before, which resulted in pleuro-pneumonia of the left lung. He coughed a great deal; expectoration dark-green and streaked with blood; never had hæmoptysis; no night-sweats nor chills; very little variation in temperature then; hoarseness and pain over larynx; good appetite; bowels regular, but somewhat inclined to diarrhœa. No trace of consumption in family history. No tubercle bacilli found. Weight, 128¾ pounds.

Physical Signs.—Left side: tympanitic resonance from apex to nipple, and absolute dulness from here to base, also absolute dulness behind and laterally at base. Cavernous sounds from apex to nipple; complete absence of respiratory sounds or râles from here to base; the same absent behind and laterally. Right chest normal.

Treatment.—Flaxseed poultices and massage, cod-liver oil and nutritious diet. He steadily improved under this treatment in all his symptoms and physical signs, until August 29th, when he weighed 135½ pounds. After this the poultice and massage lost their influence over the disease, and there was little or no progress in his case for several weeks, after which he gradually lost ground. The poultice and massage were stopped, and on December 9th the steam-jacket was applied. His weight at this time had sunk to 133½ pounds, and his physical condition was as follows: Left lung about same as at first examination, except large cavity in apex. Right lung, no dulness or impaired resonance anywhere; wavy respiration in upper third anteriorly, and broncho-vesicular respiration at base, posteriorly and laterally. Massage and cod-liver oil were discontinued. From this time he began to improve again in his physical condition, symptoms, and feelings. On December 14th he said that since he is steaming, he feels "quite like another man." On December 26th the physical signs noted are—left side: dulness from cavity to base markedly diminished, and moist râles heard here where there was complete suppression of all sounds before. Right side about the same.

Jan. 4.—The physical signs are about the same as at last examination, except that to the broncho-vesicular respiration at base of right lung are added a few moist and sibilant râles.

12th.—The physical signs were as follows: Left side: moist râles towards base diminishing, and are replaced by more normal respiratory sounds, sunken over upper third. Right side: wavy respiration still present, though improving; moist and sibilant râles have disappeared at base.

Feb. 4th.—The physical signs are: Left: moist râles below cavity less intense and less numerous; respiratory sounds now plainly perceived over whole lung below cavity. Right side: free from all moist and sibilant râles at base; wavy respiration in apex improving. Weight has not been taken since he began steaming.

He is still under treatment.

CASE IX.—Was asked to see W., married, aged forty-six, on January 18, 1884, who was well up to within one year ago, when he was taken with a cough and hæmoptysis. Had another hemorrhage three weeks before I saw him. Has now a constant cough, feels chilly, has night-sweats and sleeplessness, poor appetite, vomits after every meal, bowels regular, clubbed finger-ends. No evidence of consumption in family history. Abundance of tubercle bacilli in sputum.

Physical Signs.—Right side: Impaired percussion resonance anterior to nipple, and posteriorly to about two inches of angle of scapula, crepitation extending over this same region. Left side: Hyper-resonant and normal, though increased respiratory sound.

Treatment.—Steam-jacket and nutritious diet, as well as cod-liver oil.

February 4. — His symptoms are: Sleeps well; coughs and expectorates very little; has no chills or night-sweats; appetite medium; bowels costive; has not vomited since he began steaming, and says his general strength is improving. His physical signs are as follows: Right side: Percussion resonance in upper portion of lung about the same, although there is less marked crepitation in this region—only audible as far as the third rib anteriorly, and to the spine of the scapula posteriorly. Still under treatment.

The result of these cases might have been withheld from the medical public for a year or two longer for the purpose of observing the future development in the last three cases; but when we come to consider that in no single instance where this method of treatment has had a fair trial did it fail in a disease which is notoriously rebellious to treatment; that the complete recovery of the first three cases is placed beyond a doubt by the time which has elapsed since their treatment; and that in the last three cases the improvement and the amelioration in their symptoms and physical signs were just as decided as in the first three, I think I feel justified in their publication.

UPPER LEHIGH, PA., February 4, 1884.

BURQISM, OR METALLOTHERAPY IN THE TREATMENT OF OCULAR AFFECTIONS—HYPERÆSTHESIA OF THE RETINA.

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WE here beg to present the first of a series of cases, all treated by this method, as applicable in eye affections complicated with neurotic symptoms,

local and general. The whole series will include such cases as present themselves in daily practice, and will represent the results obtained in every case, whether successful or not. We likewise wish to mention that they are all chronic cases, most of them having undergone a variety of treatment, including correction of visual defect by glasses, without any relief however.

It will be observed that in the following article we have occasion to mention a symptom concomitant with hyperæsthesia of the retina, which we designate as *temporal reflex*. As attention has not been called to this symptom by previous writers, we shall briefly describe it, reserving for a future article its full significance in certain ocular troubles. This reflex phenomenon is elicited by gently stroking the temple with the finger from the ear towards the outer canthus of the eye. In a few patients, a small sensitive spot, about one centimetre in diameter, is found on the forehead just above the eyebrow; again, immediately below the lower eyelid. Patients describe the sensation arising from this as if they were slightly pricked by needles. It is a symptom found in hyperæsthesia of the retina, retinitis, asthenopia, sympathetic ocular troubles, and is accompanied at times with venous fulness and swollen eyelids.

CASE I. *Hyperæsthesia of retina; temporal reflex; sensibility—steel; cured.*—C. H. F., æt. 35; engineer U. S. N.; married.

Three years ago, after a great deal of mental strain and use of his eyes in rendering his accounts to the Navy Department, he began to experience great pain in and around the eyes when exposed to artificial or sunlight. Gradually this symptom became so distressing that the patient became unable to take exercise during the day, and was only able to do so after dark, and then he had to avoid gaslights in the windows and streets.

For this condition he consulted various oculists (ten), both in New York and Philadelphia. He was given glasses for his manifest hypermetropia, and at the hands of several he went through thorough and varied courses of medication. His condition went on, from bad to worse, till November 21, 1883, when we first saw him. His condition was then as follows: General health very much below par; careful examination of thoracic and abdominal organs elicited nothing of importance. The condition of the eyes was as follows: Complete intolerance of light for more than a few seconds, which would always give rise to headache, pain in the temples shooting down the back of the neck, along the arms, and sometimes over the pectoral region. There were likewise excessive flow of tears and blepharospasm. Ophthalmoscopic examination was difficult, owing to the dread of light.

By great effort and self-control on the part of the patient, the fundus oculi was explored. Conjunctivæ hyperæmic; corneæ clear; anterior chambers shallow; pupils contracted, but responsive to light; retinæ slightly reddened; arteries and veins normal in calibre; optic disks with their sheaths well defined; choroids slightly pigmented.

Vision, right eye, $\frac{20}{xx}$; J. $\frac{1}{8''}$.

Vision, left eye, $\frac{20}{xx}$; J. $\frac{1}{8''}$.

Only for a few seconds could the patient hold his vision. His manifest hypermetropia was about sph. 0.75 D. The ophthalmoscope revealed 1.75 D. of hypermetropia, slightly less in the left eye. He was ordered a solution of atropia gr. iv to f℥j, one drop to each eye thrice daily, to arrest the accommodation, to ascertain accurately the dioptric defect. This treatment was continued for four days, when his visual acuity was as follows:

Right eye, $\frac{20}{L}$; $\frac{-}{C}$; sph. $+1.75$ D. $= \frac{20}{xx}$.

Left eye, $\frac{20}{L}$; $\frac{-}{C}$; sph. $+1.50$ D. $= \frac{20}{xx}$.

A later examination confirmed the above record, and the full correction prescribed for constant use. Although these glasses were constantly worn, and outdoor exercise attended to as far as the patient's condition would admit, the photophobia and neuralgic symptoms remained unchanged. Considering the varied medication he had had without benefit, we concluded as a last resort to give him a trial with metallotherapy, of the success of which in apparently hopeless cases we had been eye-witnesses during our stay in Paris, under the direction of our illustrious preceptor, Dr. Burq. After repeated trials, the patient was found sensitive to *steel*, which was consequently ordered him in the form of tinct. ferri. chlor., ten drops three times daily.

Nov. 26.—Dynamometer: Right hand, 42 kilos; left hand, 36 kilos. Sleeps well all night through, which was not the case formerly; appetite improved; bowels free and regular, formerly constipated; distant vision improved; temporal reflex less exaggerated; retina more tolerant of light, but when by accident unduly excited, untoward symptoms now pass off, and a more normal condition is established in a shorter space of time.

From the above date to the present writing (January 29), the patient has kept steadily improving, till now he can read a column of finely printed matter of a daily newspaper; artificial and sunlight borne without inconvenience, which in itself is of great advantage to the patient, as he can now take outdoor exercise during the day; general condition much improved; appetite good; bowels regular; radiation of body-heat good, showing active capillary circulation. Dynamometer: Right hand, 44½ kilos; left hand, 39½ kilos. We may add, that during this interval the medicine was discontinued for one week, at the end of which time the temporal reflex became manifest, with slight intolerance to light. The drug was again given, when symptoms disappeared. At present he is not under treatment.

CASE II. *Hyperæsthesia of retina; temporal reflex; general neurasthenia; sensibility—gold; discharged cured.*—Miss B., æt. 25; family history irrelevant; gave the following history: Since the age of fourteen has had periorbital pain in left eye,

also extending down track of infraorbital nerve. Asthenopia, headaches, and dimness of vision; skin of an unhealthy and earthy hue; radiation of body-heat *nil;* always has cold, clammy hands and feet; sleep fails to refresh, arises tired and exhausted in the morning, has unpleasant dreams and at times nightmare; tongue coated and flabby; breath fetid; bowels obstinately constipated—at times, no passage for two weeks. Ovarian pain in left side, with very scanty menstruation, lasting on an average two days, requiring but one napkin daily; urine variable in quantity, sometimes pale and abundant, then again scanty and high-colored.

Vision, right eye, $\frac{20}{LXX}$; J. $\frac{5}{8''}$?

Vision, left eye, $\frac{10}{CC}$? *nil.*

In the right eye the ophthalmoscope revealed no lesion other than a small spot of choroiditis in the lower and outer quadrant near the periphery of fundus. The refraction was hypermetropic. The left eye had a marked pathological change. In the macular region was the evidence of an old attack of choroiditis. The area invaded was about four disk-breadths; well-marked deposits of pigment to the periphery of the spot, while several atrophied spots were visible in the centre. There was no lesion elsewhere. The arteries and veins normal in calibre, and optic nerve with its sheath well defined. Peripheral vision good. The refraction hypermetropic.

The patient was refracted under atropia, when a spherical glass + 2 D. was found to give the patient vision of $\frac{20}{XL}$ in right eye; in left eye no improvement with glasses. Dynamometer: Right hand, 26½ kilos; left hand, 20 kilos. Tactile sensibility: Points of æsthesiometer felt at a distance of four centimetres on right forearm; on left forearm, barely distinguishable at a distance of twenty centimetres. Anæsthesia extending over left side of body. The glasses giving the best vision were prescribed. Notwithstanding this, and the usual treatment adopted in such cases to alleviate the hyperæsthesia of retina, the patient's condition was only partially relieved. Encouraged by the success of our first case, we again bethought ourselves of metallotherapy. After repeated and laborious examination, her sensibility was found to be for gold. On December 15th, we instituted the treatment by gold, *inter et extra*, as follows: Tinct. auri chlor. gr. $\frac{1}{25}$, three times daily; externally to temporal region, left arm, and leg, Burq's disks. The improvement in her eyes, less sensible to light, became manifest after the second day, and general health improved until January 10, 1884, when the following notes were made of the case:

Hyperæsthesia of retina, disappeared; temporal reflex, gone; distant vision good $\left(\frac{20}{XL}+\right)$; headache but once last week; breath much purer; tongue clean; appetite good; digestion ditto. At times, slight gastralgic pains, which are attributed to the gold, as this drug is very trying to the stomach; constipation not much relieved as yet; menstruated several days ago without pain or premonition of any kind; feels in better spirits, and is able to bear fatigue well to the extent of walking two miles without any subsequent feeling of exhaustion; sleeps well at night, and feels refreshed upon rising in the morning. Muscular strength as per dynamometer: Right hand, 31 kilos; left hand, 30 kilos. Points of æsthesiometer felt at two centimetres; now more distinctly on left arm, which had previously been insensible.

Jan. 28, 1884.—Dynamometer: Right hand, 32½ kilos; left hand, 31½ kilos. Æsthesiometer, normal; no ocular trouble; detected a small sensitive spot (temporal reflex) on right temple, about size of a split pea, several days ago, after exposure to reflected sunlight while sleighing; disappeared after a few hours' rest. General condition excellent; functions normal. Treatment discontinued.

CASE III. *Hyperæsthesia of retina; general neurasthenia; sensibility—steel.*—Miss H., æt. 21, family history good.

Nov. 22, 1883.—Vision, both eyes, $\frac{20}{XX}$; J. $\frac{1}{8''}$, but fails to read for any length of time on account of pain produced, and near vision becomes blurred; headaches, and at times pain over brow, with slight temporal reflex; no lesion in fundus oculi; hypermetropia two dioptrics; full correction given for near work.

About two years ago, during a menstrual period, after exposure to wet and cold, her catamenial flow stopped. From this time she has been troubled with the following general symptoms: Ovarian pain, left side, unbearable in erect position; leucorrhœal discharge with scanty menstruation, which is always preceded and accompanied by great distress; easily fatigued, so that she can hardly attend to her household duties; bowels irregular and constipated; extremities cold, with occasional sensations of heat.

On first trial she was found sensitive to steel, which was then and there prescribed.

24th.—Patient feels much better than she has done for weeks.

26th.—General condition still continues to improve. Steel (tinct. ferri. chlor. gtt. x, three times daily), instead of constipating, relaxes bowels, producing two daily evacuations. Appetite markedly increased, so much so that patient supplements her usual three meals with a fourth; tongue quite clean. Menstruated on the 27th and 28th, without pain, and double the usual quantity of blood; scarcely any leucorrhœal discharge after menstrual period.

From November 29th to December 23d, the patient has kept constantly improving in every respect. On December 23d she again had her menstrual period; flow considerably augmented; no pain whatever, and hardly a trace of leucorrhœa, which ceased two days afterwards, and has not been noticed since. Treatment discontinued.

Jan. 29, 1884—Patient is well and able to attend to her household duties, without any sensation of fatigue, although she is on her feet during the entire day. There has been great gain of flesh. She uses the glasses for near-work, but can do without them for a longer space of time than prior to her gain of muscular tonus. The cure has been complete in every respect.

Dr. Burq's armatures, dynamometer, and æsthesiometer were used in the cases reported.

REMARKS.—The noticeable features in Case I. are the duration of the symptoms therein, completely incapacitating the patient for all active duties; the rebelliousness to all ordinary treatment, including correction of visual defect by glasses; the secondary effects they entailed, namely, anæmia, indigestion, and universal derangement of functions, due to confinement; but more noticeable still, the rapid effect of the metal appropriate to the patient's idiosyncrasy.

We especially call attention to the disappearance of the retinal hyperæsthesia, wherein are included the by-symptoms of æsthenopia and photophobia, generally so intractable, and a restoration from a chronic state of invalidism to good health.

Case II. is no less remarkable for the rapid subsidence of distressing symptoms of long standing, and the restoration of all the functions to a nearly normal standard, by the metal alone appropriate to the idiocyncrasia.

Case III. again illustrates the value of metallotherapy; the drug appropriate, once found, caused the cessation of the ovarian pain and leucorrhœal discharge without local treatment whatever. It is unnecessary more than to mention the great improvement in her general health, and the complete relief of her headaches and asthenopia, in which, however, the visual correction has its share, and the menstrual molimen more than doubled. In this case we claim for the metal the result obtained, for local applications had been used without relief.

1306 WALNUT STREET.

ON CERTAIN UNTOWARD EFFECTS FOLLOWING THE ADMINISTRATION OF TURPETH MINERAL.

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WE have recently had under our personal observation five cases in which the administration of turpeth mineral was followed by unexpected symptoms.

On the occasion in question, each of eight well-nourished men, in average health, was given five grains of turpeth mineral,[1] and as emesis did not follow within half an hour, three grains additional were given, with the result of inducing vomiting, more or less copious, within twenty minutes after the administration of the second dose. Beyond a continuation of the retching for some time, and a general complaint of a sense of burning in the throat and fauces, nothing unusual was observed at the time, and but little depression immediately followed the emesis.

On the following morning, however, our attention was called to the condition of five out of the eight men above mentioned. A rather violent diarrhœa had followed in from ten to twenty hours after the administration of the drug, attended by much griping and a rather unusual amount of constitutional depression. Each of these five men had passed in the twenty-four hours succeeding the exhibition of the drug, from eight to fifteen stools. These stools at first resembled those of calomel, but eventually became yellow. Appropriate treatment was administered, and on the following day the diarrhœa was partially or wholly checked, and the cases progressed favorably to recovery. It is worthy of note that in each case, the first few stools contained minute particles of the yellow sulphate, showing that not only had its elimination by emesis been far from complete, but also that the drug had been for from ten to twenty hours in contact with the tissues and fluids of the digestive tract.

In the fifth case, John H., a German, æt. 38, complained of a soreness of his gums, and of the large amount of saliva dribbling from his mouth. He had, up to this time, received no preparation of mercury for several months. An examination showed the gums to be soft and spongy, with the teeth partially loosened, the tongue swollen, covered with a thick, yellowish coat, and showing distinctly the imprint of each tooth. This, together with the large amount of saliva secreted, and the characteristic fetor of the breath, proved it to be a well-marked case of salivation, such as is fortunately rarely witnessed at the present day, either in hospital or general practice. Under appropriate treatment, however, the man improved, and was ultimately cured.

Had the cases been younger, or less vigorous, a different termination might have resulted.

At the time we regarded these results as peculiar, but shortly afterwards our attention was called to an article by Dr. McPhedran,[1] in which was given a detailed account of two fatal cases occurring in children, in which, however, emesis failed to result, as also a similar case in the *Medical and Surgical Reporter*.[2]

Upon examining the literature of the subject we find that Dr. Hubbard, of Maine, was among the first to use this drug, but to Dr. Fordyce Barker, of New York, belongs the credit of bringing it prominently before the attention of the profession. In an article on "Croup,"[3] Dr. Barker states that after an experience of twenty years, he considers turpeth mineral the best emetic for use in this disease, and goes so far as to recommend that it be kept on hand

[1] The drug was purchased from a reliable wholesale dealer in this city.

[1] THE MEDICAL NEWS, December 22, 1883, p. 682.
[2] January 19, 1884, p. 93.
[3] American Journal of Obstetrics, May, 1870.

in all families with children of a croupy tendency, administered at the earliest symptoms of an attack, and before sending for a physician.

Abroad, also, the drug seems to have been received with favor. Drs. Desmartis and de Titray,[1] who consider the membrane in croup as due to the result of blood-poisoning of a fermentative character, advocate the merits of the remedy as twofold, viz., as exerting a specific agency upon the ferment, and also as removing the deposits by emesis. They record its use in a number of cases, of different ages, with good results.

Again, Dr. Smith,[2] in his work on *Diseases of Children*, speaks of this drug in connection with croup, and mentions it as probably the best emetic in ordinary cases of this disease.

Prof. Alfred Stillé[3] quotes two cases occurring in adults with fatal results. In one, a boy, aged sixteen, took about a drachm of the drug; symptoms of the ingestion of an irritant poison followed, together with great salivation, and death ensued in a week's time.[4]

"In the second case, a man, æt. 27, took forty grains of this medicine by mistake for Æthiops mineral. The primary symptoms were precisely the same as in the above case just related. Death occurred at the end of ten days. The inner surface of the mouth, gums, palate, and fauces were covered with black sloughs; the parotid and submaxillary glands were enlarged; the mucous membrane throughout the intestinal canal was softened and easily torn; the glands of the stomach and intestines unnaturally large; the kidneys were much enlarged and the bladder full of urine."

A case of poisoning, with recovery, by the same drug, in a dose of "less than a drachm," is reported by Yowndes.[6]

In the *United States Dispensatory*[7] we find it stated that the drug in question operates with great promptitude, but sometimes excites salivation.

As seen by the references above given, our cases present little of novelty, excepting that the dose we used was quite within therapeutic limits, as ordinarily given; but we deem it our duty to call attention to the danger attending the administration of this drug, especially as its poisonous properties seem to have been overlooked by several recent writers on therapeutics.

Prof. Bartholow,[8] it is true, states that "serious results might be produced if emesis did not so promptly follow," which seems to agree with the experience of Dr. McPhedran already mentioned. In the cases under our own observation, however, the poisonous symptoms followed, notwithstanding that fairly copious emesis resulted in every case. The time which elapsed between exhibition and emesis (thirty-five to fifty minutes) was possibly sufficient to permit the occurrence of chemical changes in the drug as it lay in the stomach, and the minimum time of ten hours elapsing between the ingestion of the drug and its final elimination with the feces was (in one case at least) fully sufficient to account for the resultant symptoms, which were of a character tending to substantiate the statement of Miahle, that all mercurial preparations are absorbed in the form of chlorides.[1]

We are informed by several prominent dealers in drugs that the demand for turpeth mineral is quite large, and is apparently growing. This fact, together with the praise it has received in several quarters, justifies us in emphasizing the following conclusions, based upon the observations, old and new, which are given above:

1. That a dangerous quantity of turpeth mineral often remains in the stomach after emesis.

2. That this drug possesses sufficient toxic and irritant properties, not only to demand from the profession much more than usual caution in its administration, but to condemn its use where the exhibition of any other emetic is practicable.

3. That it should not be placed in the hands of the laity.

[1] Nouveau traitement du Croup et des Angines courmeuses, par les Docteurs Fillippa P. Desmartis et Alphonse Bruche de Titray, Paris, 1860, p. 28.
[2] Fifth edition, p. 548.
[3] Therapeutics, fourth edition, vol. ii. p. 769.
[4] Letheby, London Medical Gazette, xxxix. p. 474.
[5] Taylor, Guy's Hospital Reports, 3d series, x, 180.
[6] Abstract in Lancet, March 10, 1860.
[7] Fifteenth Edition, p. 767.
[8] Therapeutics, fifth edition, p. 252.

MEDICAL PROGRESS.

THE TUBERCLE BACILLUS.—In a recent paper on "The Diagnostic and Prognostic Value of the Tubercle Bacillus," DR. G. H. MACKENZIE draws the following conclusions:

1. The bacillus of tubercle is pathognomonic of tubercular disease; found in the sputum it indicates that active tubercular disease is in progress in the lungs, in the larynx, or in both.

2. It is absent in non-phthisical disease, in some cases of chronic (fibroid) phthisis, and during quiescent stages of the disease.

3. It is found in greatest numbers in acute phthisis with fever, softening, and cavity formation, but is also present in fair numbers before consolidation can be detected, especially if the larynx be affected, and it is thus useful in the diagnosis of incipient phthisis.

4. In a given case its numbers vary according to the nature and origin of the pulmonary secretion, and the period of the day at which it is expectorated, as also according to whether it is or is not free from extraneous matter in excess—*e.g.*, gastric secretion, saliva, or blood.

5. Found in the laryngeal secretion on its direct removal, it is a most valuable aid in the diagnosis of laryngeal tuberculosis.

6. In hemorrhage from the lungs, the presence or absence of tubercle bacilli in the hemorrhagic fluid has a most material influence on the prognosis.

7. Negative results in important or dubious cases cannot be held as conclusive unless examinations by different methods have been made on at least three different occasions.

8. Whilst its diagnostic value is thus of a very high standard, indicating the existence of tubercular disease, its prognostic value cannot be determined with accu-

[1] See THE MEDICAL NEWS, January 26, 1884, p. 89.

racy, inasmuch as it may be as abundant in a comparatively slow non-febrile case as it is in a more acute and febrile one.—*Edinb. Med. Journ.*, February, 1884.

ACTION OF ACONITINE ON THE HEART.—When one studies, says M. LABORDE, the action of crystallized aconitine on the heart of the frog, the following results are constantly obtained: with very small doses, about gr. $\frac{1}{5120}$, after four or five minutes, a progressive acceleration is noted, which tends to tetanic arrest. After this, the heart regains its normal function, as though the aconitine acted in the same manner as section of the pneumogastric. A proof experiment confirms the results recently announced by François-Franck; if the action of the pneumogastrics is suppressed, either by atropine or curare, the typical action of aconitine does not appear. It would seem that the drug does not affect the intracardiac ganglia, nor the central end of the pneumogastric.—*Gazette Hebdom.*, February 1, 1884.

A VIBRIO OBSERVED DURING MEASLES.—M. J. A. LE BEL reports that he has observed in the urine, during measles alone, the appearance of a slightly curved rod, very refracting, about one inch in diameter and endowed with very slow movements. The length varies considerably, so that the observer sees them of every appearance, from that of the typical vibrio to that of the bacteria.

In the case of ordinary measles, this vibrion only appears in the urine during a few days, and disappears almost simultaneously with the appearance of the fever and swelling of the face. He has observed, in the case of an infant, on the second day of the eruption, the vibrio and spores; the protoplasm which enveloped them disappeared very rapidly.

The naturally acid urine is a favorable soil for this micro-organism; it may be found in abundance in the vessels in which the urine is placed, distributed in the mass of the liquid. It is well, if one wishes to judge of the intensity of any particular attack, to examine each specimen of urine as it is passed.

This vibrio makes its second appearance at the desquamative stage; at that time also it is easy to recognize it. The skin may be scraped and the scales placed first in sterilized water and then in sterilized urine; within twenty-four hours large numbers of the micro-organism may be seen. In severe and persistent cases, it reappears in the urine and on the skin for weeks and even months.

Le Bel states that he has been extremely careful in his observations, and has no reason to think that they are not correct.—*Journ. de Méd. de Paris*, Jan. 19, 1884.

TRAUMATICINE.—Traumaticine is the name given by SCHIVARDI to the solution of one part of pure guttapercha in ten parts of chloroform, and may be used as the vehicle for the application of various substances to the skin. It forms on the skin a hard, resistant, and lasting pellicle. The solution can be made ready for application in a very few moments. The slow volatilization of the chloroform from the mixture enables one to use it for frictional applications.

Traumaticine is not irritating, and has also the advantage of being cheap. It has been especially recommended by Prof. Auspitz. In the treatment of psoriasis, he uses a ten per cent. solution of traumaticine and chrysarobin; after having detached the greater part of the scales by a soap-bath, the solution is applied, by means of a fine, short brush, to the patches, the part being rubbed with the brush. Each application is preceded by a soap-bath—repeated more or less frequently, according to the intensity of the affection. In a few cases, one application a day will suffice, and the patient is cured in four or five days. The application never causes the least irritation. Auspitz has several times used it for herpes tonsurans, eczema marginatum, and prurigo. In the last affection, a ten per cent. solution may be used for adults, and a five per cent. for children; ordinarily the prurigo disappears suddenly.

Traumaticine is also a good excipient for pyrogallic and salicylic acids. Schivardi uses it in the treatment of chilblains, and proposes it as a remedy in acute orchitis.—*Gazz. degli Ospitali*, December 29, 1883.

OBLITERATION OF THE ABDOMINAL AORTA.—GYSELYNEK reports the case of an officer, æt. 23 years, addicted to drink, and under treatment for syphilis for a period of three years, who died of gangrene of the lower limbs. He had suffered for five years with palpitation of the heart, symptoms of oppression, slight cyanosis, and a quick, small pulse. On the fourth day after admission to the hospital, the lower extremities became cold, and he complained of pain along the larger vessels. This was followed by loss of sensibility in the legs and increased temperature. On the seventh day, gangrene set in, and gradually extended upward to the sacrum, when the patient died on the thirtieth day. The autopsy showed that the aorta was obliterated by a thrombosis just above the bifurcation. The centre of the thrombus contained micrococci.—*Centralbl. für Chirurgie*, December 22, 1883.

COCKLEBURR IN THE LARYNX; LARYNGOTOMY. DR. E. VAN NOTE reports the case of a girl, æt. 11 years, who accidentally got a cockleburr into the larynx. Having attempted in vain to remove the foreign body through the mouth, laryngotomy was performed two days after the accident, and the burr removed. The child made an easy and quick recovery.—*St. Louis Courier of Med.*, February, 1884.

TOTAL VAGINAL EXTIRPATION OF THE UTERUS.—DR. W. A. DUNCAN successfully removed the entire uterus, per vaginam, for malignant disease, on January 22d, at the Royal Hospital for Women and Children. The patient, according to the *Lancet* of January 26th, is progressing satisfactorily.

ANTIFERMENTATIVE PROPERTIES OF BICHROMATE OF POTASH.—DR. LAUJORROIS has recently made experiments which have demonstrated that bichromate of potash possesses antifermentative and disinfectant properties to a high degree. Bichromatization (the word by which he expresses his new method of disinfection) will indefinitely protect animal matters from the action of the causes of putrefaction.

In March, 1876, a physician sent to Dr. Laujorrois a scirrhus of the mammary gland, which he had removed. It was macerated for a month, at a temperature of 10° or 12° C., in an aqueous solution of bichromate of potash (grs. v. to f℥j.). It was then taken out and exposed to the free air, without any covering to protect it from the

action of external agents. Since that time it has undergone extreme variations of heat and moisture, but in November, 1882, it showed no sign of putrefaction.

In February, 1882, he placed five hundred grammes of urine in an open vessel and added five grammes of bichromate of potash to it. Eight months afterward, the urine thus bichromatized, presented no sign of putrefaction. It was clear, limpid, and without sediment or odor. Human blood, treated in the same manner, was found to be equally well protected against putrefaction.

The excrements of phthisical patients mixed with a 1 to 100 solution of bichromate of potash, immediately lost all odor. Milk has been treated in this manner, and with the same results as to the absence of putrefaction.

Laujorrois reports a case of malignant pustule treated by incision and bichromate dressing 1 to 100, and the patient was cured on the fifteenth day.—*Journ. de Méd. de Paris*, December 29, 1883.

MOIST GANGRENE OF FOOT AND LEG TREATED BY AMPUTATION THROUGH THE MIDDLE OF THIGH.—The following case, under the care of MR. PAGE at Newcastle-upon-Tyne Infirmary, is confirmatory of the views expressed in an editorial in THE MEDICAL NEWS, of January 5.

A gardener, aged fifty-nine years, a very intemperate man, was admitted on September 13, 1883, in consequence of moist gangrene of the right foot and leg. The disease commenced thirteen weeks previously, and it was still progressing. All the toes had separated. The whole of the foot was dead, and a large patch of gangrene had just appeared on the outer side of the leg. The stench was intolerable, and the man was reduced to such an extent by pain and exhaustion that it seemed probable, if unrelieved, he would not survive many days. His whole arterial system was in a very pronounced condition of calcareous degeneration. On September 14, the limb was amputated through the middle of thigh. The femoral artery was so much diseased that an attack of secondary hemorrhage was fully anticipated; but all went well, and on September 24, the antiseptic dressings were discontinued, as the wound was entirely healed. The patient remained in hospital till October 21, and was then discharged with a good sound stump.

Whether it is better to amputate or not in cases of spontaneous moist gangrene, and if so, where and at what stage of the disease, are questions upon which there is room for much difference of opinion. In every instance in which Mr. Page has waited for a line of demarcation to form, the patient has died exhausted. In this case the relief which followed the removal of the limb was immediate; the tongue became moist, the look of prostration soon passed away, the patient was at once able to sleep and to eat, and the wound healed by first intention.—*Lancet*, January 5, 1884.

AN IMPROVED METHOD OF AMPUTATING THE PENIS.—SURGEON-MAJOR T. J. MCGANN gives the outlines of four cases of amputation of the penis by the following method: The patient is placed on the table in the lithotomy position, and chloroform having been given, an assistant, holding the scrotum in both hands, draws it forwards, keeping the raphe of the scrotum and perineum in the same line. An incision of two and a half or three inches in length is made behind the scrotum in the median line, with its centre over the bulb; the corpus spongiosum having been completely exposed, and a little fine dissection made so as to separate it laterally from the corpus cavernosum, the scrotum is allowed to drop and is drawn slightly backwards, and the penis having been seized, is pulled forwards and removed by a single sweep of the knife close under the pubis. The few bleeding vessels having been twisted or tied, the scrotum is again drawn forwards as before, when the cut surface of the corpus spongiosum presents itself through the posterior incision, and this being separated from the corpus cavernosum, is turned down into the perineum, and left hanging out there half an inch beyond the level of the skin. The front and back incisions are then united by a few points of suture, and the protruding spongy body slit on the lower or posterior aspect and the edges united to the perineal skin on either side by two points of suture. The operation is completed.

On the completion of the operation there is but a small wound visible in front, and the scrotum, which is practically intact, has to be raised to render the posterior incision visible.—*Indian Med. Gazette*, December, 1883.

A NEW MERCURIAL PREPARATION; HYDRARGYRI TANNICUM OXYDULATUM.—DR. SIGMUND LUSTGARTEN has recently called attention to the chemical and therapeutic properties of a new mercurial salt, which he prepared in the laboratory of Prof. E. Ludwig, and which he has employed in the different forms of syphilis.

This salt is the tannate of the protoxide of mercury (hydrargyri tannicum oxydulatum), which contains fifty per cent. of mercury. It is a dull green powder, without odor or taste, and is only soluble when decomposed. Hydrochloric acid makes no sensible impression upon it, but very dilute alkalies, ammonia, solution of caustic potash, and the alkaline carbonates, reduce it in a short time to a sort of magma composed of very small particles of metallic mercury. They are so minute that the greater part of them present, under the microscope, the phenomenon known as molecular movement. This process of reduction is produced under the influence of the alkaline reaction of the intestinal juices; whence, it may be asked, if the absorption of the particles of mercury is produced in the same way in the intestines as on the skin by mercurial friction? The determination of this question has occupied the attention of Lustgarten for some time. He has now been able to demonstrate the rapidity of the absorption of mercury into the blood, having found mercury in the urine in twenty-four hours after its administration.

This new drug has been prescribed in two or three doses of grs. jss every day, but in spite of this seemingly large dose no troubles of the stomach and bowels have been observed, nor the troubles usually seen when the ordinary mercurial preparations—calomel or corrosive sublimate—are administered; nor has stomatitis or salivation been observed, although the very large dose of grs. xc has been given. On the contrary, in ten cases treated, up to this time, comprising every period of syphilis, and especially cases of relapse of a very rebellious nature, as syphilides with small papules and pustular syphilides, there was so rapid a regression of the lesions that Lustgarten does not hesitate to place the new drug by the side of the best mercurial preparations hitherto employed.—*Ann. de Dermat. et de Syphile*, January 25, 1884.

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THE TREATMENT OF DIPHTHERIA.

IN an editorial last week we considered the subject of the topical treatment of diphtheria. We now turn our attention to its systemic management.

Medicines, properly speaking, are prescribed in diphtheria for two purposes: to check the exudation, and to prevent the diffusion of the germs of the poison. Certain special indications are afforded in the state of particular organs; as, for example, irritability of the stomach; endocarditis; albuminuria; delirium; each of which may demand special attention. Again, the method of treatment may be merely symptomatic, or it may be specific—directed against the symptoms as they appear; or used to produce a curative effect by some unknown influence over the *fons et origo mali*. As, in the present state of uncertainty regarding the latter, the remedies which have a truly specific character cannot be determined, it will be better to consider the treatment from the symptomatic point of view.

Rarely are antipyretic remedies necessary. In the more formidable cases, the temperature may be but little elevated, may, indeed, be subnormal. In the more vigorous subjects, having a sthenic activity, the first signs of faucial inflammation are best encountered with the tincture of aconite root, one or two drops every hour or two. If, on the other hand, circulatory depression and low or subnormal temperature are the conditions present, good results are had from belladonna tincture, two to five drops every three to six hours. As an irritable stomach may be present from the very beginning, the remedies used must be directed to this symptom. Then creasote, or carbolic acid, with or without tincture of iodine, becomes exceedingly useful. If convulsive phenomena, excessive nausea, and depression of the circulation coexist at this period, calomel in small doses—one-fourth, one-half, to one grain—given at short intervals has an excellent effect in checking the nausea and the nervous disturbance. When the cathartic action takes place, it should be discontinued, and carbolic acid or creasote given.

Bromide of ammonium appears to us to have an excellent effect in checking the diphtheritic exudation. It has a sedative action on the fauces, and, being eliminated, in part, by the mucous membrane of the pharynx, makes a local impression antagonistic to the morbid action. It may, therefore, be regarded as having an action of specificity—as an agent destructive of the microbes undergoing multiplication in the mucous membrane. The time for its administration is when the exudative process is beginning, and before systemic infection, or, at least, systemic depression, has occurred. It is not useful when the condition of gangrene, or septicæmia, or decided adynamia is present. It should be given in moderate doses of three to ten grains, frequently, and well diluted.

The most popular remedy in diphtheria, amongst the profession at large, is chlorate of potassium. There is a notion prevalent that it has a specific action. The origin of this conception is obvious. In certain cases of stomatitis the curative action of chlorate of potassium has that degree of certainty and promptness which belongs to the effect regarded as "specific." Its use in diphtheria has been generalized from this admitted curative action in stomatitis in accordance with the ancient therapeutical maxim—"a remedy which has proved curative in one case, must act beneficially in analogous cases." In this instance, as in so many others, the rule is fallacious. The good results due apparently to the chlorate, are, in many cases, only the outcome of the *post hoc*. All objections considered, there is still a mass of clinical observation more or less favorable to its use. We may admit that in the early stages of diphtheria it can do some good, but if the kidneys become damaged it not only ceases to be useful, but may be injurious. If, as Feltz and Ritter have shown, the symptoms of uræmia are due to the retention of the potassium salts in the blood, the exhibition of the chlorate can only increase the head symptoms.

The combination of the tincture of ferric chloride with chlorate of potassium is probably more widely used than the latter alone, and, doubtless, justly so. Clinical experience appears to be in favor of the combination, but how far its utility is supported

numerically remains to be shown. Good results have, apparently, been produced by the topical application of the solution, conjoined with its stomachal administration.

Since Guttmann's very enthusiastic introduction of pilocarpine, the utility of this remedy has been both denied and reaffirmed. It acts surprisingly well in some cases, but is entirely unsuited to the greatest number. When the false membrane is not extensive, tends toward or invades the larynx, and the vital forces are not depressed, pilocarpine softens and detaches the exudation, and has a favorable influence over the subsequent progress of the case. In the septicæmic form of diphtheria it is generally contraindicated, but in the event of urinary suppression it may render an important service. Whenever cardiac failure is threatened it is inadmissible. Notwithstanding the limitations imposed to its use by reason of its depressant action, cases have come to our knowledge in which, although the contraindications were pronounced, and the general aspect unfavorable, it proved remarkably effective.

The increasing importance of the germ theory, and the unquestionably good effects of that class of remedies known as germicide, render the use of certain antiseptic agents highly interesting and suggestive. Quinine belongs to this group. It is employed, however, rather to stimulate the vital processes than to arrest the development of microbes. Indeed, it may be well questioned whether it can destroy the micrococcus of diphtheria, as it surely cannot prevent its pullulation. The use of large doses is to be deprecated, for the depression of function thereby caused cannot fail to be injurious. On the other hand, small doses serve a useful purpose in promoting the activity of the assimilative functions.

Unquestionably, the most powerful antiseptic now available for the destruction of germs is the corrosive chloride of mercury. It has been shown, also, that this agent is, within certain limits, a reconstituent tonic. In addition to theoretical considerations, clinical experience can be adduced in its favor. There is a growing disposition to regard it as the most important means now available to check the formation of false membrane, and to prevent the diffusion of germs from the point of local infection. Calomel, in part converted into bichloride, probably, acts similarly. This remedy has long occupied a high place in the esteem of a few practitioners who have employed it in the so-called true croup, as a sedative and an aplastic agent. With this view, doses of calomel, which must be regarded as "massive"—from five grains to a scruple every four hours—have been employed with asserted advantage. Any curative effect exerted by mercurials must be referred to three chief influences: parasiticide, aplastic, and eliminant. Doubt no longer exists in regard to the parasiticide power of the corrosive chloride, and calomel, although less active, must possess somewhat of the same property. Although we believe that, in general, mercurials do not affect the formation of false membrane in diphtheria, they act in one respect like pilocarpine; they act on the glandular apparatus of the mouth and fauces; the exudation is softened and detached, and, probably, its reformation checked. To these effects of mercurials must be added the eliminant. The stools produced by the purgative action of calomel in cases of diphtheria are peculiar in appearance and character, and are offensive in a marked degree. Septic materials are thus eliminated from the system.

Iodine has a place similar to that occupied by mercury. It is destructive of germs, hinders their diffusion, and checks the fermentative process, to which they are necessary. Its utility is, in our judgment, very great. The best form of administration is Lugol's solution, and with this may be combined carbolic acid, especially when the stomach is irritable, and when more active antiseptic action is demanded.

The phenol group, composed of carbolic acid, salicylic acid, resorcin, thymol, chinolin, and some others, from the theoretical standpoint, should have a good effect by destroying the specific germs, and arresting the morbid fermentations, either initiated or promoted by them. The practical results achieved by these remedies are not equalled by the expectations which *a priori* would be formed of their utility. The best effects have been witnessed from resorcin. Probably, phenoresorcin will prove still more useful. Allied to the agents of this group are eucalyptol and turpentine, both of which have been used with, apparently, good results. Whilst the phenol remedies are prescribed with reference to their antiseptic powers, eucalyptol and turpentine are indicated when the surface is cyanosed and the circulation feeble.

The complications of diphtheria demanding interference are, properly speaking, mere incidents in the course of a disease which may leave no single organ unharmed. The extension of the exudation to the nasal or laryngeal mucous membrane; the paralytic phenomena; the cardiac changes, and the kidney lesions, are the most important. Besides the treatment appropriate to the disease in any situation, special measures are necessary for these complicating conditions. It is more especially in laryngeal diphtheria that pilocarpine, bromide of ammonium, calomel, and lime-water spray are suitable remedies. In nasal diphtheria, the local use of carbolic acid, carbolate of iodine, and resorcin solutions, following a preparatory treatment by the

solvents; and the systemic treatment by alcohol, corrosive sublimate, and quinine.

As the paralytic phenomena play a serious *rôle* in the morbid complexus, it is in a high degree important to prevent the functional derangement of the nerve centres, on which the loss of power depends. The precise seat of the disturbance of function has not been fixed on, but some recent observations tend to establish the existence of temporary lesions of the multipolar ganglion cells of the anterior cornua, and of the nerve trunks. The ganglia of the sympathetic are probably the media through which the impressions are conveyed to the nerve centres. It follows that the remedies best adapted to act on the paralysis are picrotoxin, ergot, belladonna, and digitalis. The usual error consists in waiting for some overt act before prescribing for the paralysis, and sudden death may signify choking of the glottis, paralytic congestion of the lungs, or a weakened heart. For the last mentioned and the sluggish circulation dependent thereon, we have a hopeful remedy in nitroglycerine. As endocarditis and interstitial nephritis may be due to migrating micrococci colonies, the most effective remedy will be corrosive sublimate.

A wise and diligent supervision should be maintained over every case of diphtheria until complete restoration to health will warrant security. The mildest case is not without its evil side. Any case may consist in a succession of surprises. He will prove the most successful therapeutist who conjoins to careful management of existing conditions judicious provision against possible accidents.

MICROCOCCI AND ACUTE SUPPURATION.

FROM observations published by OGSTON, of Aberdeen, in 1880 and 1881, it would appear that micrococci are the exciting causes of acute suppuration. Thus, the contents of seventy-four ordinary abscesses, examined immediately after their evacuation, disclosed an abundance of these organisms, which had penetrated into the tissues without any injury of the surface. Inserted under the skin of small animals, the pus ordinarily set up suppurative inflammation, and the animals exhibited signs of febrile disturbance. In chronic or scrofulous abscesses, on the other hand, micrococci could not be detected, nor was the injection of the pus contained in them followed by abscess or illness.

The conclusions of Ogston have not been confirmed by more recent experiments conducted by German pathologists. In Virchow's *Archiv*, Bde. lxxxvi., xc., and xcii., may be found papers from the pens of USTKOFF, ORTHMANN, and COUNCILMAN, which represent not only their own views, but those of Ponfick, Rosenbach, and Cohnheim, as to the occurrence of suppuration without the intervention of low forms of life. Through the subcutaneous injection of oil of turpentine, croton oil, and olive oil, under antiseptic precautions, suppuration was provoked, but the pus did not contain micrococci.

The experiments of the German observers demonstrate the occurrence of acute suppuration without the presence and intervention of micrococci, and render the position of Ogston, to say the least, questionable. Still more recently, however, STRAUS, in a contribution to the *Bulletin de la Société de Biologie*, for 1883, has repeated these investigations, and reached the conclusion that not only are micrococci essential to the formation of pus, but that the irritants employed by his predecessors are not pyogenic, although they are phlogogenic. In other words, the German observers induced suppuration by irritating injections, but their methods were faulty in that they permitted the entrance of germs beneath the skin which they failed to detect. Straus found micrococci in the five cases out of eighteen in which pus followed the insertion of oil of turpentine; and he bases the correctness of his statements upon the thirteen negative results, without appearing to imagine that his methods may be considered faulty.

We may be permitted to say that pathologists demand more convincing proofs of the causal connection between micrococci and acute suppuration than have as yet been presented to them. One set of observers assert one thing, another set, equally dogmatic, assert another; and it would be strange indeed if their followers were able to reconcile their conflicting views. Will not Koch and his equally careful assistants undertake the solution of this vexed and interesting question?

TOXIC EFFECTS FROM EMETIC DOSES OF TURPETH MINERAL.

THE cases reported in our issue of this week showing the toxic effects of subsulphate of mercury, when given as an emetic, are peculiarly timely—for, as the reporters state, the use of this remedy has been increasing. The popularity of this emetic is owing to the unqualified praise of Dr. Barker, to whom the modern revival of this remedy is due. In his article commending it, Dr. Barker makes no distinction as to the form of croup requiring it, nor does he differentiate between true croup and pseudo-croup. It is true, he makes several varieties, which it must be admitted have no pathological existence, but much the largest number of cases in which his croup powders are used, are really examples of laryngismus stridulus. It need hardly be asserted that in a malady so little important, so powerful a remedy is unadvisable.

The immunity with which turpeth mineral is given as an emetic, depends on the promptness and completeness of its action—on the return of the poison with the vomited matters. From this point of view a full dose is safer than a small one. But not all subjects are equally susceptible to its action. There are some on whom it acts imperfectly and slowly, thus giving time for its irritant action. There are a few on whom it appears to have no proper emetic effect, and hence they suffer from gastro-enteric inflammation, and acute mercurialismus. We have known some instances of this kind, and can, therefore, confirm the observations of Drs. Randolph and Roussel.

All deductions made, there yet remain two classes of cases in which subsulphate of mercury is undeniably useful. First, the cases of "inflammatory croup"—so called by Dr. Barker—really examples of acute laryngitis; second, cases of true croup. In the light afforded by the accidents from its use, this remedy should not be administered in laryngismus stridulus.

THE ASSAY OF QUININE PILLS.

THE method for the assay of quinine pills, as detailed in a circular recently issued by Messrs. McKesson and Robbins, in accordance with their promise of last month to furnish a new and simple process, is, in a slightly modified form, that most commonly adopted by chemists for such investigations, with the application of the same principle adopted by THE MEDICAL NEWS COMMISSION in its investigation of the commercial samples of the article.

This method consists essentially in dissolving a definite number of the pills in water acidulated with diluted sulphuric acid, by the aid of a gentle heat, precipitating the alkaloid by ammonia water, and subsequently abstracting the alkaloid from the mixture by means of ether. While, however, in our previously reported analyses, the mixtures containing the alkaloid, made alkaline by ammonia water, were agitated with successive portions of pure ether until the aqueous liquid, after acidulation, no longer afforded any reaction with alkaloidal reagents, and the entire amount of ethereal liquid afterward was evaporated, the proposed method of manipulation limits the amount of ether for the abstraction of the quinine from twenty grains of sulphate, to fifty cubic centimetres. By the subsequent evaporation of twenty-five cubic centimetres of the ethereal solution so obtained it is assumed that one-half of the alkaloid contained in the mixture will be thus represented.

Although the latter method of procedure, when carefully followed, will afford *approximately* correct results, which, indeed, is all that is claimed, it is questionable whether it would commend itself to careful analysts, or even in inexperienced hands afford results so satisfactory as the obtainment of *all* the alkaloid by the use of larger and successive portions of ether.

For the evaporation of the ethereal solution, the use of a watch-glass, as recommended in the process, is open to serious objection. The extreme volatility of ether, together with the remarkable density of its vapor, would, with the greatest care, almost necessarily involve considerable loss in its evaporation from so shallow a surface, by spreading over the edge of the receptacle; and a capacious tared glass capsule of greater depth, or a tared glass flask, would be much better adapted to the purpose.

Since crystallized quinine loses its water of crystallization at 125° C., and fuses at 168° C., the directions to heat the evaporated product "strongly" by holding the glass, with "a pair of crucible tongs or any convenient substitute, over a gas or spirit flame," should be followed with considerable caution to avoid decomposition; when available, a hot air-bath, with proper regulation of temperature, would be far preferable to the application of direct heat for the dehydration of the alkaloid.

In the calculation of the result of an analysis, instead of multiplying the amount of anhydrous alkaloid obtained by 436, and dividing the product by 324, it need but be multiplied by the factor 1.3456, when the product will at once represent the corresponding amount of crystallized sulphate $(C_{20}H_{24}N_2O_2)_2H_2SO_4,7H_2O$.

In the test for the purity of the quinine, the amount of ether directed to be employed to dissolve the latter ("six times its weight of ether, sp. gr. 0.725") appears remarkably small, since the United States Pharmacopœia and other authorities state that crystallized quinine requires about *twenty-five parts of ether* for solution.

THE CHOLERA BACILLUS.

IN another column will be found a statement of the latest results of the labors of the German Cholera Commission now in Calcutta, which, with the letter of our Berlin correspondent, furnishes the full text of Koch's fifth report.

It will be noted that there were found in the intestines of cholera patients the same bacilli as were found in Egypt; that these bacilli were isolated and successfully cultured, and that they possessed characteristic properties as to form and growth, and can now be recognized with certainty from other bacilli. These characteristics are not described in detail, but no bacilli presenting them have been found in the intestines of eight persons dying of other diseases, or in the intestinal contents of

other animals or in other substances rich in bacteria. It need scarcely be said that these results are of the greatest importance.

The profession will await with interest the reception which will be given by the savants of the French capital to Koch's explanation of the discrepant results obtained by the French Commission in Egypt. For it is scarcely conceivable that the members of the Commission selected by the distinguished Pasteur should know so little of the histology of the blood as to be misled by blood-plates.

SOCIETY PROCEEDINGS.

NEW YORK STATE MEDICAL ASSOCIATION.

Convention for Organization held in Albany, February 4th and 6th, 1884.

MONDAY, FEBRUARY 4TH. FIRST SESSION.

IN compliance with an invitation issued during the last week of January, a number of members of the medical profession of the State of New York assembled in the parlors of the Delavan House, Albany, at 8.30 P.M., February 4, 1884.

After calling the roll, seventy-six being present (more entered the rooms later, making a total of about one hundred), the object of the convention was briefly stated by DR. J. W. S. GOULEY, of New York, as follows:

In view of the dissension which has been created in the Medical Society of the State of New York by the radical change made in its Code of Ethics, it was suggested that a convention be held on the day preceding the session of the State Society, to discuss the question of this change in all its aspects, and finally to take such action as the majority assembled should decide upon. Therefore it is, Gentlemen, that you have been invited to meet here by members of the profession who have signed the call for the convention, which is as follows:

The undersigned, permanent members of, and delegates to, the Medical Society of the State of New York, request you to attend a meeting to be held in the parlors of the Delavan House, Albany, on Monday evening, February 4th, at 8.30 o'clock, to take into consideration the question of the Code of Ethics, which will come up before that Society on the day following.

TEMPORARY OFFICERS.

DR. H. D. DIDAMA, of Onondaga County, was called to the Chair, and DR. CHARLES S. WARD, of New York County, was appointed Secretary.

On taking the Chair, DR. DIDAMA stated that the object of the conference was to exchange opinions regarding the proper course to be pursued by the adherents of the National Code of Ethics.

Telegrams were read from Drs. John P. Gray, of Utica; J. G. Orton, of Binghamton, and C. C. F. Gay, of Buffalo, regretting their inability to be present.

THE CANVASS OF THE STATE.

DR. GOULEY, of New York, then presented a report of the canvass of the State, and made the following statement:

Total number of physicians in the State,	5002
Number of those who have not expressed their preference, ...	1142
Total number of votes recorded, .	3860

The recorded votes are as follows:

For the National Code, ...	2547
For the "New Code,"	1040
For no code, ...	239
Unclassified, ...	34
Total, .	3860

It is evident from these figures, he said, that there is a majority for the National Code over the whole number of committed and uncommitted. That there is a majority of more than two-thirds for the National Code over the "New Code," and a nearly two-thirds majority for the National Code over the "New Code," no code, and unclassified combined.

It is now proper that you should know how stands the vote in the State Society; and here let me say that, although we have a majority, our adherents will do as they have done before—stay away—and we shall be outvoted. I doubt much if on Tuesday night we poll more than one hundred votes. According to the *Transactions* of 1883, the State Society has thirty-three retired members, who are not entitled to vote, and should have 386 voting members and delegates, but I cannot count more than 382.

Of these there are for the National Code,	193
For the "New Code,"	134
For no code, ...	19
Uncommitted, ...	36
	382

Now, Gentlemen, that you have before you these facts and figures, I leave you to decide what measures it may be wise for this assembly of representative men to take.

TO VOTE AGAINST THE NEW CODE.

DR. E. D. FERGUSON, of Rensselaer Co., moved that all the members and delegates present in Albany, who are in favor of the reënactment of the National Code, be requested to attend the meeting of the State Society on Tuesday evening, for the purpose of protesting, by their vote, against the action taken by the Society in substituting the "New" for the National Code, and of endeavoring to secure the reënactment of the National Code.

DR. T. F. ROCHESTER, of Erie Co., seconded the resolution, and said that the members and delegates would fail in their duty if they did not present this protest.

DR. AUSTIN FLINT, JR., of New York, said: It is more than a year since I have publicly spoken to an audience of friends on the questions which have at last divided the medical profession of the State of New York. As you all well know, thus far the battle-field in the warfare against the honor and dignity of the profession has been mainly in the City of New York. In the City of New York, the conspiracy, which has brought about the deplorable conflict that has been forced upon us, had its inception. The attack upon the most sacred traditions of our profession was there made with a malignant rancor that can only be fully appreciated by

those who have been personally involved in this unhappy contest. Our experience teaches us that but one course is now open to those who are unwilling to remain in the false and humiliating position in which we are placed. The proper course is for us to organize a new State Association, to be composed exclusively of those who refuse to countenance professional relations with irregular practitioners.

The loyal members of the profession in the County of New York, having exhausted all proper means of resistance in the existing Societies, and with an untarnished record as regards the methods employed by them in the contest, have organized on a permanent basis, the New York County Medical Association, composed exclusively of those who uphold the National Code of Ethics.

To-night we should organize a New York State Medical Association. The issue has been forced upon us. We stand in the presence of the actual fact of a divided profession. The State Society and the Society of the County of New York have seceded from the regular profession of the United States. We made no movement looking to the formation of a loyal State Association until the most vigorous efforts to redeem the existing Societies had signally and hopelessly failed. We are now cast out of fellowship with the regular profession of this great country, as represented in the American Medical Association and in the medical societies of other States. We must redeem the State of New York. There remains but one course to pursue, and that is to form an Association of our own.

I hope, Mr. Chairman, that a New York State Medical Association will be organized to-night, in affiliation with the regular profession of the United States; that the existing County Societies whose membership is loyal will put themselves at once in affiliation with the new State Association; and that, in counties in which the existing societies cannot be brought in bodily, new Associations will be promptly organized, to be composed exclusively of members of the profession who uphold the National Code of Ethics.

While holding to these views, I am cordially in favor of the resolution offered by Dr. Ferguson, simply in order that we may put ourselves on record in the State Society, as I believe, for the last time.

DR. C. G. BACON, of Oswego Co., was in favor of Dr. Ferguson's resolution, and of continued efforts from year to year, until success should be achieved.

DR. FERGUSON, with the consent of Dr. Rochester, temporarily withdrew his resolution.

THE ORGANIZATION OF A NEW STATE ASSOCIATION.

DR. AUSTIN FLINT, SR., of New York, after stating that he thought it improbable that a two-thirds vote could be obtained in the State Society in favor of reënacting the National Code of Ethics, and that consequently the time had arrived for the formation of a new State Association, introduced, with a preamble reciting the well-known circumstances under which the "New Code" was adopted, the following resolution:

Resolved, That the members of the medical profession of the State of New York, here convened, do now unite in forming an organization to be known as the NEW YORK STATE MEDICAL ASSOCIATION.

The resolution was seconded by DR. FREDERICK HYDE, of Cortland Co., in a fitting speech.

DR. E. M. MOORE, of Rochester, could not believe that the time had arrived for the formation of an association separated from the State Society. He thought there had not yet been opportunity to have full expression in the State Society of opinion from the whole State, and he was in favor of postponing the organization of the association until Wednesday morning, at which time we should be better informed, and therefore better prepared with reference to our future action.

DR. ROCHESTER, of Buffalo, was very glad to think that there was a prospect of a medical association which would be strictly voluntary without any hampering by State legislation.

DR. ELY VAN DE WARKER, of Syracuse, said:

Certain issues growing out of this contest in the State Society must be grappled fearlessly, for they are inevitable. Peace can never be restored. We know this to-night just as well as we shall know it Wednesday morning. We shall go into the contest in the State Society on Tuesday night simply for form's sake, and without a hope that we shall reverse the policy of the Society; therefore I can see no reason to delay the preliminary formation of the new State Association.

Another thing which appears to me just as certain to grow out of this division is this: unless the unscrupulous minority which controls the State Society is made up of brag and bluster, they must go on with the work. Their aggressive policy must extend to the County Societies. It is one thing, by the preponderating influence of three great county organizations, to be able to control the State Society; it will be another thing to invade each county medical society, and coerce them all into conformity to the new order of things. To make the "New Code" the medical law of the land they must do this. To allow each county medical society to exist quietly with the Code of the American Medical Association as a part of its organic law is to admit cowardice, defeat, and a cringing fear of the storm they have raised. To do less than this will make them the laughing-stock of the world, and an object of contempt of all right-thinking men. They cannot go back, the day of strife is yet before them, as they will find out, and they must meet it. For this, let us prepare, let us fore-arm, let us prepare here in this great central association, and make a home for those county medical societies that will resist coercion! Here they can come and find comfort and protection. We owe them this protection, and we shall do less than our duty if we neglect the opportunity.

Drs. C. G. Pomeroy, of Wayne Co., Austin Flint, Jr., and Gouley, of New York, Seymour, of Rensselaer Co., and G. W. Cooke, of Ulster Co., urged the adoption of the resolution.

DR. E. D. FERGUSON, of Troy, spoke for the preamble and resolution, and moved that they be adopted to-night, but that such adoption should be in force only in case the State Society shall fail on Tuesday evening to reënact the National Code, otherwise the action of to-night shall be void.

DR. M. W. TOWNSEND, of Genesee Co., moved that Dr. Flint's preamble and resolution be laid on the table until Wednesday. Lost by a tie vote.

DR. GILLIS, of Franklin Co., and DR. J. C. GREENE, of

Erie Co., thought action on the resolution should be deferred until after the vote had been taken in the State Society on the resolution to restore the National Code.

DR. D. GUERNSEY, of Dutchess Co., DR. GOULEY, of New York, and DR. DIDAMA, of Syracuse, advocated the resolution. No harm, Dr. Didama thought, could come from our organization to-night. We can go to the State Society, enter our protest against the unfair and clandestine action of 1882, and ask that the National Code be restored. If, by some unexpected impulse of good judgment and kindly feeling, our appeal shall be heeded, then this Association may be discontinued. But if the minority should persist in trampling upon our rights—as we all believe they may—then, if we are men respecting ourselves and deserving the respect of our constituents, we shall reassemble on Wednesday morning, and end the fruitless and disgraceful wrangle of the past two years by finishing the good work we have so well begun this evening.

The motion to lay on the table was renewed, and lost by a rising vote of twenty-one for tabling and thirty-four against.

DR. FLINT'S preamble and resolution, with the limitation as to the time of enforcement as provided in the resolution offered by Dr. Ferguson, were then adopted; the vote, on motion of Dr. Rochester, being declared unanimous.

THE OBJECTS OF THE NEW ASSOCIATION.

DR. T. B. REYNOLDS, of Saratoga Co., offered the following:

Resolved: That the objects of this Association shall be the cultivation and advancement of the science of medicine. Carried unanimously.

DR. GOULEY offered the following

PLAN OF ORGANIZATION.

Resolved: That the following plan of organization be adopted:

1st. To facilitate the transaction of business, such as the selection of committees, the annual election of officers and of new members, etc., the State shall be divided into five geographical districts, to be called respectively, the 1st, or Northern District; the 2d, or Eastern District; the 3d, or Central District; the 4th, or Western District; and the 5th, or Southern District.

These districts shall comprise the sixty counties of the State.

2d. A Nominating Committee shall be created, to consist of two members from each of the above-named districts—elected by the representatives of each district—and one appointed at large by the Chair. In all eleven members.

3d. The Nominating Committee shall name, subject to the approval of the Association, a President and four Vice-Presidents—these five officers to come one from each of the five districts—a Recording Secretary, a Corresponding Secretary, and a Treasurer.

In addition, said Committee shall name two members from each district, who, together with the titular officers and one member appointed at large by the President-elect, shall constitute the Council, which shall manage the affairs of the Association.

The Nominating Committee shall suggest the time and place for holding the next session of the Association.

4th. The Council shall complete the organization, prepare a constitution and by-laws, in accord with this plan, to be presented at the next meeting of the Association, and file articles incorporating the New York State Medical Association, and also County Associations, as branches of said New York State Medical Association. The Council shall also assist the President in securing scientific contributions.

5th. In case no meeting of this Association be held prior to May, 1884, the Council shall appoint delegates to the National Association and to State Societies.

6th. The Council shall fill such vacancies as may occur in its body during the current year, except in the office of President and Vice-President.

7th. The ten members of the Council shall constitute a quorum.

8th. The initiation fee shall be five dollars, and the annual dues three dollars.

9th. The code of ethics, which shall form an integral part of the by-laws of this Association, shall be as follows:

The same as that adopted by the American Medical Association.

10th. The Association shall hold annually one session, which shall last three days or more.

The above plan of organization was adopted unanimously.

THE MEMBERSHIP.

DR. FERGUSON moved that all physicians in the State of New York who are in good standing in the present County Societies, and who subscribe to the code of ethics of this Association, can become members thereof upon paying the initiation fee and signing the constitution and by-laws. Carried unanimously.

DR. ROCHESTER moved that all questions relating to the admission of new members, prior to the permanen organization, shall be decided by the Council. Carried unanimously.

NEW COUNTY ASSOCIATIONS.

DR. HYDE moved that, after the formation of new County Associations as branches of this Association, the members of said County Associations may become members of the State Association by paying the initiation fee and signing the constitution and by-laws. Carried unanimously.

TO VOTE TO REPEAL THE NEW CODE IN THE STATE SOCIETY.

DR. FERGUSON then reintroduced his resolution concerning the attendance at the session of the State Society on Tuesday evening for protest against the present code, and for the support of the National Code. Carried unanimously.

The convention adjourned at 11.30 P.M., to meet at 9 A.M., Wednesday, February 6th.

[As is well known, the motion in the State Society to repeal the New Code was lost on the following evening.]

WEDNESDAY, FEBRUARY 6TH. SECOND SESSION.

The Association met in adjourned session at 9 A.M. The minutes of the first meeting were read and approved.

THE NOMINATING COMMITTEE.

The members from the five districts then met in separate portions of the room, and, after consultation,

presented the following list of names as the Nominating Committee, Dr. Austin Flint, Sr., being appointed a member at large by the Chair.

1st District.—Dr. Ira H. Abell, Antwerp, Jefferson Co.; Dr. L. C. Dodge, Rouse's Point, Clinton Co.

2d District.—Dr. T. B. Reynolds, Saratoga Springs, Saratoga Co.; Dr. Thomas Wilson, Claverack, Columbia Co.

3d District.—Dr. A. D. Head, Syracuse, Onondaga Co.; Dr. Caleb Green, Homer, Cortland Co.

4th District.—Dr. Darwin Colvin, Clyde, Wayne Co.; Dr. Thos. F. Rochester, Buffalo, Erie Co.

5th District.—Dr. D. Guernsey, Amenia, Dutchess Co.; Dr. J. W. S. Gouley, New York City and Co.

The Nominating Committee then retired.

DR. H. O. JEWETT asked for information concerning

THE RELATION OF THE ASSOCIATION TO COUNTY SOCIETIES.

The subject was informally discussed, and no action at present was favored, though the formation of County organizations in affiliation with this Association was considered desirable, and that, at a proper time, such measures should be taken as might be necessary.

THE NEXT PLACE OF MEETING.

DR. FLINT, JR., tendered the hospitalities of New York City for the next meeting of the Association.

DR. C. S. WOOD, of New York Co., offered a resolution that the invitation of Dr. Flint be accepted. Carried.

An informal expression of opinion was then requested as to the proper time for the next meeting of the Association, and finally a poll was taken of those who had preference as to the time of such meeting, which resulted in a majority favoring the third Tuesday in November.

DR. FLINT, JR., then moved that the third Tuesday in November of this year be appointed as the time for the next meeting of the Association.

ELECTION OF OFFICERS.

The Report of the Nominating Committee was then presented.

President.—Dr. H. D. Didama, Onondaga Co., 3d District.

Vice-Presidents, 1st District.—Dr. J. M. Crawe, Jefferson Co.

2d District.—Dr. Tabor B. Reynolds, Saratoga Co.

4th District.—Dr. B. L. Hovey, Monroe Co.

5th District.—Dr. N. C. Husted, Westchester Co.

Recording Secretary.—Dr. Caleb Green, Cortland Co.

Corresponding Secretary.—Dr. E. D. Ferguson, Rensalaer Co.

Treasurer.—Dr. John H. Hinton, New York Co.

Councillors, 1st District.—Dr. John P. Gray, Oneida Co.; Dr. Conant Sawyer, Essex Co.

2d District.—Dr. J. W. Moore, Albany Co.; Dr. Thomas Wilson, Columbia Co.

3d District.—Dr. Frederick Hyde, Cortland Co.; Dr. Ely Van de Warker, Onondaga Co.

4th District.—Dr. E. M. Moore, Monroe Co.; Dr. M. W. Townsend, Genesee Co.

5th District.—Dr. E. R. Squibb, Kings Co.; Dr. A. Flint, Jr., New York Co.

DR. E. M. MOORE moved that the report of the Nominating Committee be accepted, and it was then adopted unanimously.

MEMBER OF THE COUNCIL AT LARGE.

DR. DIDAMA, after thanking the Association for the honor conferred, appointed Dr. J. W. S. Gouley as member of the Council at large.

NEW MEMBERS.

DR. FERGUSON moved that the Council be authorized to receive new members. Carried.

DR. VAN DE WARKER moved that a Committee of three be appointed to secure the coöperation of a medical journal in sympathy with the wishes and interests of this Association. Carried, and referred to the Council for the appointment of such committee.

DR. H. B. ALLEN moved that the Corresponding Secretary be directed to furnish blank applications for fellowship. Carried.

A meeting of the Council was directed to be called immediately after the adjournment of the Association.

One hundred and sixty-eight members signed the agreement of organization.

The Association then adjourned to meet in New York City on the third Tuesday in November, 1884.

NEW YORK COUNTY MEDICAL ASSOCIATION.

Stated Meeting, February 18, 1884.

THE PRESIDENT, WILLIAM DETMOLD, M.D., IN THE CHAIR.

DR. GEORGE L. PEABODY presented a specimen of

SARCOMA OF THE DURA MATER.

The patient from whom the specimen was taken, he said, had been a man seventy-two years of age, who had died on the 9th of January last in the New York Hospital. As the autopsy revealed a large tumor, which made a considerable depression on the external convolutions of the brain, it had been a matter of interest to find out the clinical history of the case. The man had always been a free liver, though he was not intemperate in his habits.

About 7 P.M. on the 8th of January he slipped and fell violently on the pavement; but immediately got up without assistance and walked to a neighboring barroom, where he sat down. In fifteen minutes, however, he became unconscious, and was brought to the hospital. It was noted on his admission that there was a hæmatoma of some size under the scalp, on the left side of the cranium, and that there was some œdema of the lower extremities. The pulse was that of compression, slow and full (sixty-eight to the minute), and the temperature normal. Before death, however, both the pulse and temperature were considerably raised. The autopsy was made five hours after death. Extensive meningeal hemorrhage was found, which resulted from the rupture of a meningeal vessel at the time of the patient's fall, and was probably the cause of the coma. In the left parietal region was the tumor, which was flat on the side towards the dura mater, but convex on the surface that pressed upon the cerebral hemisphere. The case, Dr. Peabody said, was interesting as offering a contribution to the subject of cerebral localization, although a negative one. There was a large tumor pressing upon the brain to such an extent that it had made a well-marked depression of its surface; but the seat of the growth was

not in the motor tract. The patient had never had any paralysis, epileptic or apoplectic seizures, or even any headache, and his friends had never seen any reason to suppose that he had anything the matter with his brain. The autopsy also showed a condition of diffuse nephritis.

DR. GOULEY said that, twenty years ago, he had made the autopsy in the case of a young lady who had a much larger tumor of the dura mater than this, which pressed upon both hemispheres. It was of about the size of his fist. He had known the patient for some time, and she had never had any convulsions or any other symptoms referable to trouble in the brain; but the shape of her head was very peculiar, long and pointed like a sugar-loaf. When he had had the case under observation for about a year, the young lady died of perforation of the appendix vermiformis, and the autopsy revealed the presence of the tumor described. He had reported the case in the first number of the *New York Medical Journal*, in 1864, when it was published with a plate.

A SPECIMEN OF STENOSIS OF THE PULMONARY ARTERY.

DR. AUSTIN FLINT, SR., then presented a specimen, which he said was of rare interest, and which was at his disposal only for this evening. It was a heart presenting well-marked stenosis of the entrance to the pulmonary artery, in consequence of which the normal condition of the ventricles was exactly reversed, the left ventricle being much atrophied, and the right greatly hypertrophied. He believed the stenosis to have been congenital. The subject was a lad, nineteen years of age, who was admitted to the hospital for some trouble about his toe-nail. As he was seen on one occasion to have severe palpitation of the heart, an examination of the organ was made, when it was found that there was a loud systolic murmur present. It was supposed to be a mitral regurgitant murmur, although the situation of its maximum intensity was a little higher than ordinary. In reality the sound was produced by the sigmoid valves. The cause of death was scarlet fever. The patient had never had any cyanosis or other symptom indicating heart-trouble.

DR. JANEWAY mentioned a case of stenosis of the pulmonary artery which he had seen several years ago. In this instance there was very marked cyanosis, and the patient finally died of phthisis. It was a remarkable case as showing the greatest amount of destruction and consolidation of lung tissue which he had ever seen compatible with the preservation of life, the autopsy revealing that only a portion of the lower lobe of one lung was in a serviceable condition. The cyanosis in this case seemed to be advantageous rather than otherwise.

DR. DETMOLD then made some remarks on

THE DIAGNOSIS AND TREATMENT OF SYPHILIS.

All were aware of the difficulty sometimes met with in deciding whether certain symptoms seen in a patient were of a specific character or not, especially in cases in which the patient was unwilling to tell his true history or was really ignorant of his ever having had syphilis. There was one sign which he considered pathognomonic, although the text-books did not seem to attach much importance to it, and it had never yet deceived him. It was well known that certain diseases had special predilections for special tissues and organs. Thus, scrofula was particularly liable to attack bones with a large amount of cancellated structure, like the scapula and head and neck of the femur. Syphilis, on the other hand, selected an entirely different class of bones for its seat. It was the body of the bones which it attacked, and especially of those bones not covered by large masses of fibrous or muscular tissues. Of all other parts, it preferred the anterior aspect of the tibia; but was also very liable to attack the surface of the ulna, the sternum, the bones of the skull, and the bones of the nose. Whenever secondary syphilis gave rise to periostitis, it would be found that œdema over the part invariably resulted, and, moreover, that this œdema was permanent.

The pathognomonic sign of which he had spoken, was this permanent œdema over the anterior surface of the tibia. In no case, in all his experience, had he ever seen it entirely disappear, and hence its great diagnostic value.

He did not, of course, mean to say that œdema of this region was always of specific origin, as it was liable to result from injuries of various sorts; but when it was found on both tibiæ, and when no local cause could be discovered for it, there could be no reasonable doubt that it was due to syphilis. When periostitis had resulted in the formation of nodes, if seen in time, he was sometimes in the habit of denuding the periosteum subcutaneously, when the growth would disappear. A number of surgeons had confirmed by their observations his opinion in regard to the diagnostic value of permanent œdema on the tibia.

His treatment of syphilis was somewhat different, he continued, from that ordinarily employed. Some years ago a gentleman suffering from the disease had been under his care, who presented such an intolerance to mercury, as usually prescribed, that the treatment always had to be interrupted, and it seemed extremely difficult to secure a permanent cure. While in the army in Germany, Dr. Detmold had been familiar with the treatment by mercurial inunction carried to the point of salivation, which was then in vogue there; but this plan was obviously inapplicable in this case. He, therefore, made trial of the external use of a solution of bichloride of mercury, two grains to the ounce, which he instructed the patient to rub upon each of his extremities successively, using half an ounce of the solution at each application, night and morning.

The result was far beyond his anticipations, and since then he had constantly resorted to this plan of treatment, to the exclusion of all others. The application was perfectly clean, without inconvenience, without local effect upon the skin, never produced salivation, and, above all, was perfectly successful. He had thought in a few instances that he had observed griping pains in the stomach result from it after a time, and he had also occasionally noticed a slight discoloration of the finger-nails, which he was disposed to attribute to the friction in rubbing. He had, however, never observed the toe-nails to see whether they were discolored also. This treatment he preferred to any other with which he was acquainted, and it had now been tried successfully in various hospitals. Only a few days ago Dr. Leale had assured him of the great success which he had met with in carrying it out, and he trusted that any of those present who had not given it a trial, would do this whenever occasion should offer.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Stated Meeting, February 25th, 1884.

THE PRESIDENT, S. OAKLEY VAN DER POEL, M.D., IN THE CHAIR.

DR. WM. S. HALSTED read a paper on

THE EFFECTS OF ADDUCTION AND ABDUCTION ON THE LENGTH OF THE LIMB, IN FRACTURES OF THE NECK OF THE FEMUR,

in which he claimed that, together with the measured length of the limb in such fractures, its position, as regards adduction or abduction, should be carefully noted; and that all statistics of these fractures were worthless which did not take into consideration the amount of adduction or abduction present. He had made a careful research in regard to the matter, and illustrated the points taken in the paper by a series of geometrical diagrams on the black-board.

DR. A. B. JUDSON said that while the paper was a scholarly attempt to apply an exact science to a problem in surgery, he was not sure that the point claimed was one of great practical importance. It seemed to him that the acetabulum was such a short distance from the head of the femur and the vertical line passing through the malleolus, that he doubted whether any great amount of measured shortening could be obtained by adduction or abduction.

DR. JOHN A. WYETH thought that the methods of measurement were all practically very inexact, and this was due in a great measure to the normal differences in the length of the femur, and of the entire limb on the two sides. This normal difference might even be as great as an inch, and it was a very rare thing to find the two limbs of exactly the same length. This consideration, in his opinion, did away with the possibility of making any satisfactory attempt to obtain accurate measurements. The difference was not great one way or the other in intracapsular fractures of the femur, and he thought it was not practicable to apply exactness of measurement to such accidental lesions.

DR. HALSTED said, in regard to Dr. Judson's idea, that the angle was too obtuse to be of any practical importance, and that he believed he was mistaken. In the case in Bellevue Hospital, which led him to make a special study of this subject, the patient stated that he had never had the slightest limp before. The apparent shortening was two inches, while the measured length of the injured limb was one-eighth of an inch greater than that of the other, and hence it was thought that there could be no fracture. He decided, however, that there was an intracapsular fracture. There were three things that he took into consideration: First, the adduction, making the limb longer; second, the adduction of the other limb, which was paralyzed, making it shorter; and, third, the fact that one limb might be naturally longer than the other. His demonstration had a direct bearing, he thought, on both diagnosis and treatment. With an adducted, impacted fracture, with apparent shortening, the patient was sure to limp.

NEW INVENTIONS.

NEW TRIAL-FRAMES.

BY L. WEBSTER FOX, M.D.,

OPHTHALMIC AND AURAL SURGEON TO THE GERMANTOWN HOSPITAL; CLINICAL ASSISTANT, EYE DEPARTMENT, JEFFERSON MEDICAL COLLEGE HOSPITAL, ETC.

THIS trial-frame for the adjustment of glasses, Fig. 1, consists of a horizontal bar upon which moves the frames for holding the trial lenses; these frames are moved by a screw (after the lunette du Dr. Armaignac) which adjusts the pupillary distance and registers the same.

The nose-rest is held in position by a screw, and can be elevated or lowered at will. That part of the frame for holding the lenses is divided into three spaces of sufficient width to allow the cylinder lenses to be rotated.

FIG. 1.

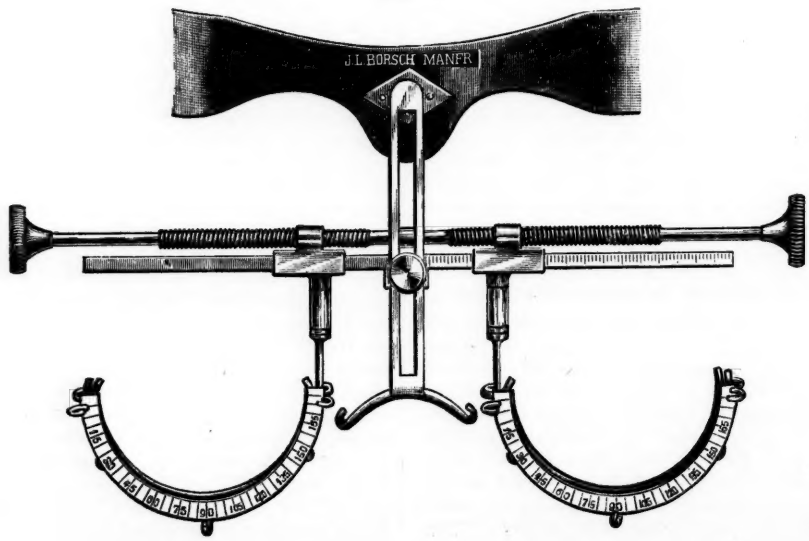
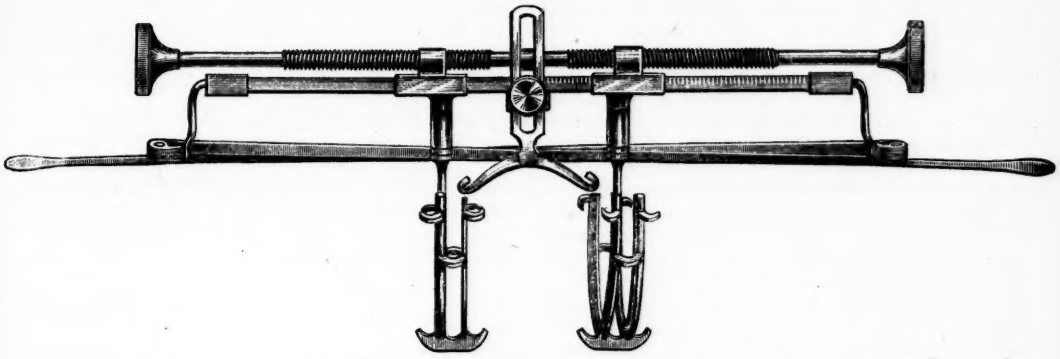


FIG. 2.



On the plate are engraved numbers indicating the axis of the cylinder

The frames holding the lenses are held in position by a socket-joint, which allows of their being turned forward on their axes. This obviates the necessity of either removing the trial lenses or elevating the frames, thereby exposing both eyes, when it is desirable to make a comparison test. The frames are held in position by a head-band or temples. The temples are fastened to the horizontal bar (see Fig. 2). Fastened to the temples are triangular-shaped wings, which prevent reflected light from falling on the posterior part of the lenses.

The woodcut drawings represent the exact size of the trial-frames. They are made out of a material combining lightness with strength and durability.

Fig. 2 represents the trial-frames with temples attached and the frames for holding the lenses turned forward.

John L. Borsch, Optician, 221 South Ninth Street, is the maker.

1306 WALNUT STREET.

CORRESPONDENCE.

GEOGRAPHICAL DISTRIBUTION OF URINARY CALCULUS.

To the Editor of THE MEDICAL NEWS.

SIR: Please allow me to correct a statement made by Dr. Keyes, of New York, in an article on "The Geographical Distribution of Urinary Calculus," etc., which appears in THE NEWS of March 1st. He states that "Mr. Dudgeon, of Pekin, who succeeded Kerr in China," etc. Dr. D. did not succeed Dr. Kerr, as I was Kerr's successor myself in the Native Hospital at Canton, and whilst there operated on some two hundred or more cases of lithotomy. In an article giving statistics of my first one hundred and forty cases, published in the "Medical Reports of the Chinese Customs," I give several reasons for the frequency of this disease in the Southern Province of China, all of which combine to produce it—amongst them the hard water used by the natives. Just at Canton, the water is soft; but had Dr. Dudgeon penetrated as far into the interior of the country as Dr. Kerr and I have done, I think he would have found the water which rushes down between those lime hills, hard. I do not pretend to say that this is the only reason why the natives of this locality have stone, but it is one of them, and, I am inclined to think, the principal one.

Very respectfully,

F. CARROW, M.D.

WILMINGTON, DEL., March 4, 1884.

COMPENSATION FOR EXPERT TESTIMONY.

To the Editor of THE MEDICAL NEWS.

SIR: In your editorial of March 1st, on "Compulsory Expert Testimony without Remuneration," you state that Iowa alone has secured justice to the expert through legislation, which, while technically correct, does not adequately represent the present status. The Supreme Court of Indiana, in 1878, declared the right of the expert to compensation. In the same year, Judge Clark, in the "State of Texas *vs.* Jasper Weathers," maintained the same right. In 1877 a Circuit Court of West Virginia did the same, while the Supreme Court of Alabama took the opposite view, which probably accounts for the action of the Greene County (Alabama) Medical Society. In Ohio, the Common Pleas Court of Madison County in April, 1882, of Franklin County in June, 1883, and doubtless others, have established the precedent of awarding experts reasonable compensation. It is a question whether judicial decisions are not a better security for justice in this matter than legislative acts.

While writing on legal topics, I would also call your attention to an error in the last sentence of the Cincinnati correspondence in the same number. The law already is compulsory, declaring that the superintendent of an infirmary, etc., *shall* deliver the body on the written requisition of a professor of anatomy. There has been no difficulty in getting a supply of material in Columbus since the passage of the Anatomy Act, but as long as Cincinnati maintains *five or six* medical colleges, no law is likely to give them a full supply.

Respectfully yours,

HENRY G. LANDIS, M.D.

COLUMBUS, OHIO, March 1, 1884.

NEWS ITEMS.

BERLIN.

(*From our Special Correspondent.*)

THE KOCH MISSION, FIFTH REPORT.—Following the preliminary and less interesting communications the

fifth report of the Cholera Commission is just received, and proves to be of the greatest importance. As THE MEDICAL NEWS will give a complete translation of it, I only send you the concluding passage, which might destroy a good many preconceived opinions still existing in America, and therefore ought to be published as early as possible. It runs as follows:

"I learn from the medical journals, that the French Commissioners, who had been sent to Egypt for the exploration of the cholera, declare in the report given by them, that they have gained different results from those communicated by myself, having found organisms in the blood, which, according to their view, are peculiar to cholera. Since hereafter it might give the impression that the researches of the German Commission were being prosecuted in the wrong direction, I think it necessary to explain to your Excellency my opinion concerning the above statements.

"In the blood of the healthy man—besides red and white blood-corpuscles—there exist in varying quantity small, roundish, pale elements, the so-called blood-plates (Blutplättchen). In some febrile diseases, typhus fever and pneumonia for instance, these elements are greatly multiplied, and in consequence of their resemblance to micro-organisms have been repeatedly taken for bacteria. In the blood of individuals suffering from cholera, and of those who have died from that disease, they are likewise almost regularly multiplied, as we were able to verify in the cases of cholera examined. This fact, after all, is not a new one, since it has been already mentioned by former examiners. D. D. Cunningham, for instance, as early as 1872, in his *Microscopical and Physiological Researches into the Nature of the Agent Producing Cholera*, has given a very good figure of these formed elements of the choleraic blood.

"Now, since even the most approved methods fail to recognize in the cholera blood any other elements similar to bacteria, and since the description given by the French Commissioners in every respect corresponds with the above-mentioned 'blood-plates,'[1] I cannot but conclude that the French Commission, falling into the same error as other examiners before, has taken the 'blutplättchen' for specific organisms. Any etiological connection with cholera cannot be ascribed to these blood-plates, since, as I have already mentioned, these elements are also met with in the blood of healthy individuals, and of persons suffering from other diseases."

Cutting criticisms have never been expressed with more gentleness and directness.

As for the rest of the report, its statements again merely confirm the observations made in Egypt. Pure cultures of the bacilli constantly met with in the intestinal walls and in the stools of uncomplicated cases of cholera, have proved that these bacilli are gifted with constant qualities characterizing their shape and their mode of growing in nourishing gelatine, whilst these characteristic elements were invariably absent in other diseases. The choleraic material was taken from nine post-mortem examinations and eight clinical cases.

In addition, interesting remarks are made on the influence of the new well-water supply in Calcutta on the decrease of the cholera mortality. The water was found to be of a very good quality. Hearty thanks are given to the British authorities for the lively interest shown in the work of the Commission, and the active support rendered in that city.

Everybody who had the honor of Dr. R. Koch's personal acquaintance, knew full well from the beginning that no vague theoretical suggestions would emanate from him, and the fifth report of the German Commission cannot fail to persuade even the most sceptical minds of the entire reliance to be placed on the statements which he has made.

DR. KOCH, in his fifth report, dated Calcutta, January 7th, and just published in the *Deutsche med. Wochenschrift*, Feb. 14, 1884, states that between December 16th and January 7th, nine autopsies were made, and material has also been obtained from eight cholera patients. The cases succeeded each other in tolerably regular order, so that there was ample time for investigating each. Several cases which, after a short and entirely uncomplicated course, proved fatal, were examined very soon after death.

Microscopical examination showed, in all these cases, the presence of the same bacilli in the intestines as were found in Egypt. In the report of September 17, 1883, the suggestion was thrown out that possibly these bacilli might be, as are so many other bacteria, regular parasites of the human intestine, and not peculiar to the cholera patient, and at that time distinguishing characteristics were wanting. This difficulty, however, has now been fortunately removed. Attempts to isolate the cholera bacilli and to make cultures have succeeded. Close observation of these cultures has brought out some very characteristic properties as to their form and their growth in gelatine, by which they can be recognized with certainty from other bacilli. It now remains to be determined whether these bacilli may be generally found in the intestine, or whether they are exclusively confined to the intestines of cholera patients.

In the first place, by means of gelatine cultures, the bacilli were demonstrated in the dejections of cholera patients and in the contents of the intestines of cholera corpses, and this was the case in all the observed cases; while in the contents of the intestines of bodies dead from other diseases, the bacilli of the choleraic intestines were not found. Up to this time eight bodies of persons dead of pneumonia, dysentery, phthisis, and kidney disease have been examined. Furthermore, the intestinal contents of different animals, and other substances rich in bacteria, were examined, but no bacteria resembling cholera bacilli were found. If these bacilli with specific properties are entirely confined to the cholera process, then there will scarcely be a doubt as to the relation between this process and the appearance of these bacteria, even if attempts to reproduce the disease in animals have not succeeded. Still, recent experiments of this kind have been so far satisfactory that we have reason to expect further favorable results.

The Commission has also studied, as far as possible, the relations of cholera to the City of Calcutta. It is only in the cities outside of India, which have been affected with cholera at long intervals, that the influence exerted on cholera by sanitary improvements, such as

[1] The readers of THE MEDICAL NEWS have been made well acquainted with these blood-plates by the excellent article of Prof. Osler, in the last number of the year 1883, page 701.

good drinking water, drainage, and the like cannot be determined with certainty. On that account every regulation should be carried out in the cities which, like Calcutta, have a considerable yearly cholora mortality. Previous to 1870, the average yearly mortality of Calcutta from cholera was 10.1 per thousand. Since 1870 it has fallen to 3, or more than threefold. It is to the improvement of the sanitary condition, and the bettering of the water supply especially, that these cities must hereafter look for an escape from cholera. The Commission has, to this end, inspected the water works and the canals of the city. They have also made a number of analyses of the river water, both before and after filtration in the water works of Pultah, and of the drinking water in the city.

UNITED STATES BOARD OF HEALTH.—At the recent meeting of the House Committee on Public Health, a substitute for the National Board of Health's bill, "For the prevention of the introduction and spread of contagious and infectious diseases," was presented. The substitute provides for the formation of a United States Board of Health, composed of the Surgeon-Generals of the Army, Navy, and Marine-Hospital Service, gives the quarantine work to the Treasury Department, and the investigation into sanitary matters to the Navy, through its Museum of Hygiene.

THE SURGEON-GENERAL OF THE NAVY.—The President, on the recommendation of the Secretary of the Navy, has appointed Surgeon Gunnell to succeed Surgeon-General Wales as Surgeon-General and Chief of the Bureau of Medicine and Surgery of the Navy.

SURGEONS J. S. BILLINGS and J. S. BROWN, U. S. A., have been detailed to attend the International Health Exhibition which meets at South Kensington in May next, and to represent the Department at the International Medical Congress which will convene at Copenhagen in August next.

THE INVESTIGATION INTO ADULTERATED DAIRY PRODUCTS is being pressed upon the attention of Congress, and the House Committee on Public Health has already given the subject some attention. A resolution has been referred to it which will open up the whole subject of oleomargarine, suine, butterine, and other imitations of butter.

YELLOW FEVER AT HAVANA.—There were six deaths from yellow fever at Havana during the week ending February 23, 1884.

SANITARY COUNCIL OF THE MISSISSIPPI VALLEY.—The Sixth Annual Meeting of the Sanitary Council of the Mississippi Valley will be held in the city of Memphis, Tenn., on Wednesday, March 19, 1884.

A CASE OF MISTAKEN SEX.—The case of mistaken sex reported by DR. WM. P. MCGUIRE, of Winchester, Va., in THE MEDICAL NEWS of February 16th, has attracted widespread interest. We learn that since the publication of the article, the party has married, and he reports to Dr. McGuire that he has regular sexual intercourse with ejaculation of semen, which, owing to the position of the external opening of the urethra, does not fall into the vagina. With this exception, both parties maintain that the act of coition is complete.

TATTOOED WOMAN BEARING A TATTOOED CHILD.—A paragraph has been going the rounds of the newspapers for the last few days, to the effect that a tattooed woman who has been exhibited in most of the large cities, had given birth to an infant bearing marks on its body similar to those on its mother's. We are informed by Dr. A. T. Shertzer, of Baltimore, who attended the woman in her confinement, that there is no truth in the statement, and that the infant bears no unusual marks.

THE AMERICAN JOURNAL OF OPHTHALMOLOGY.—Dr. Adolf Alt, of St. Louis, Mo., announces the publication of a monthly journal under this title, the first number of which will be issued on April 15, 1884.

COMMENCEMENT OF THE UNIVERSITY OF LOUISVILLE.—At the Annual Commencement, held on Thursday, February 28th, the degree of Doctor in Medicine was conferred upon eighty-four candidates. Prof. J. A. Octerlony delivered the Valedictory Address.

COLLEGE OF PHYSICIANS AND SURGEONS, BALTIMORE.—At the Twelfth Annual Commencement of the College of Physicians and Surgeons, held on March 4th, the degree of Doctor in Medicine was conferred upon one hundred and twenty-seven candidates.

THE NEW YORK POST-GRADUATE MEDICAL SCHOOL AND HOSPITAL.—The new building occupied by the above school and hospital, has a frontage of ninety-five feet on East Twentieth Street, and is four stories high above the basement. In the latter are situated the drug department and the general waiting-room for patients, together with a number of rooms used for dispensary purposes.

On the first floor are a large and well-lighted lecture-room and examining rooms for the several departments, and also the office and a handsome and well-equipped reading-room.

On the second floor are class-rooms assigned to the different chairs, and in which practical courses are given to classes limited to a certain number of students. Some of these rooms are fitted up with costly apparatus and appliances.

The third floor is devoted entirely to hospital purposes.

The fourth floor is used partly for hospital purposes and partly for the accommodation of the employés. On this floor there are also two rooms fitted up by Prof. Roberts for photographic purposes, and furnished with a skylight, etc. For greater convenience as to light, the pathological laboratory is also on this floor.

In a detached building in the rear, are the mortuary and the rooms for practical anatomy and operations on the cadaver. Accessible by a separate entrance is an accident ward for the reception of emergency cases.

Taken as a whole, the building is thoroughly adapted for the purposes to which it is applied. The location is central as regards the principal hospitals and dispensaries, and is accessible from all parts of the city by means of elevated and surface railroads.

THE NEW YORK SKIN AND CANCER HOSPITAL.—The position made vacant by the resignation of Dr. Hunter

has been filled by the appointment of Dr. J. E. Janvrin, with Dr. J. R. Goffe as his assistant.

INTERNATIONAL OTOLOGICAL CONGRESS.—The next International Otological Congress will meet at Basle, on September 1st and continue until the 4th. A detailed programme will be issued about June 1st. Communications should be addressed to M. Le Dr. Burckhardt-Mérion, at Basle.

THIRD CONGRESS OF INTERNAL MEDICINE OF BERLIN.—This Congress will be held on April 21st to 24th, under the presidency of CH. FRERICHS. The following are the subjects for discussion: *First day*, Pneumonia. *Second day*, Poliomyelitis and Neuritis. *Third day*, Nervous Dyspepsia. The following communications have been announced: Hermann Weber, Hygiene of English Schools, considered especially with Regard to Contagious Diseases. Rosenthal, The Reflexes. Goltz, Localization of Cerebral Functions. Pfeiffer, Vaccination. Siegen, Diabetes. Rossbach, Treatment of Infectious Diseases; New Applications of Naphthaline.

PROFESSOR TARNIER.—By a decree of February 5, 1884, M. TARNIER has been appointed Professor of Obstetrics and Diseases of Women and Children, in the Faculté dè Médecine of Paris.

PROFESSOR FRERICHS.—The Russian Government has conferred on Professor Frerichs the Grand Cordon of S. Stanilaus, in recognition of his services in connection with the education of Russian students in the Universities of Breslau and Berlin.

SIR SPENCER WELLS IN ITALY.—Sir Spencer Wells, who has been making a short stay in Italy, has been received by his Italian confrères in Rome and Naples in a very cordial and gratifying manner. At Naples he was publicly addressed by Professors Schrön and D'Antona, and by the students.

YELLOW FEVER AT RIO JANEIRO.—The Consul General at Rio Janeiro has sent to the State Department, a tabular statement showing the number of deaths at that place from yellow fever, from the year 1850 to 1883 inclusive. It is too elaborate to reproduce here, but an examination of the table indicates that the disease was more fatal in the following years: 1850, 4160 deaths; 1852, 1943 deaths; 1857, 1425 deaths; 1860, 1249 deaths; 1870, 1117 deaths; 1873, 3467 deaths; 1875, 1291 deaths; 1876, 3317 deaths; 1880, 1573 deaths, and 1883, 1494 deaths. No deaths occurred from the disease in 1855, 1856, 1858, or from 1863 to 1869.

HEALTH IN MICHIGAN.—Reports to the State Board of Health for the week ending February 23, 1884, indicate that rheumatism, diarrhœa, intermittent fever, influenza, pneumonia, whooping-cough, and bronchitis have increased, and that inflammation of the bowels and measles have decreased in area of prevalence.

Including reports by regular observers and others, diphtheria was reported present during the week ending February 23d, and since, at ten places, scarlet fever at twenty-three places, and measles at ten places. One death from trichiniasis was reported at Niles Feb. 22d.

OBITUARY RECORD.—DR. ROBERT THOMAS COLEMAN died in Richmond, Virginia, on March 4th, æt. 53 years. He graduated in Medicine from the University of Virginia in 1850, and in 1851 received the degree of M.D. from the Jefferson Medical College, Philadelphia. He then entered the Philadelphia Hospital as an interne, where he remained for two years, and returned to Richmond in 1854. In the autumn of this year, when the hospital was converted into a school for clinical instruction, the Board elected him lecturer upon clinical medicine. This honor was declined, and he remained in Richmond until the outbreak of the war. After entering the Confederate Army, he was rapidly promoted to the grade of Brigade-Surgeon, and was made Chief Surgeon of the Stonewall Division, when that body was organized. He was twice temporarily detached from his division to act as President of the Commission of Inspection, being in this position second only to the Secretary of War. In 1865 he was elected Professor of Obstetrics in the Medical College of Virginia, which position he held until his death.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM FEBRUARY 26 TO MARCH 3, 1884.

BAILY, J. C., *Major and Surgeon.*—Granted leave of absence for one month, to take effect on or about March 1, 1884, with permission to apply to the Adjutant General of the Army, through Division Headquarters, for an extension of three months.—*S. O. 24, headquarters Department of Texas*, February 26, 1884.

BENHAM, R. B., *First Lieutenant and Assistant Surgeon.*—Relieved from duty at Fort A. Lincoln, D. T., and ordered to Fort Sisseton, D. T., for duty.—*Par. 1, S. O. 22, Headquarters Department of Dakota*, February 26, 1884.

PHILLIPS, JOHN L., *First Lieutenant and Assistant Surgeon.*—Assigned to temporary duty at Fort Warren, Massachusetts.—*Par. 2, S. O. 39, Headquarters Department of the East*, February 28, 1884.

FISHER, WALTER W. P., *First Lieutenant and Assistant Surgeon.*—Assigned to duty at the Presidio of San Francisco, Cal., from 18th inst.

POLHEMUS, A. S., *First Lieutenant and Assistant Surgeon.*—Assigned to duty at Fort Winfield Scott, Cal., from 18th inst.—*S. O. 23, Par. 1 and 2, Headquarters Department of California*, February 21, 1884.

DIETZ, WILLIAM D., *First Lieutenant and Assistant Surgeon.*—Assigned to temporary duty at U. S. Military Academy at West Point, N. Y.

PHILLIPS, JOHN L., *First Lieutenant and Assistant Surgeon.*—Assigned to temporary duty in Department of the East.

MEARNS, EDGAR A., *First Lieutenant and Assistant Surgeon.*—Assigned to duty in Department of Arizona.

KNEEDLER, WILLIAM L., *First Lieutenant and Assistant Surgeon.*—Assigned to duty in Department of Dakota.

BLACK, CHARLES S., *First Lieutenant and Assistant Surgeon.*—Assigned to duty in Department of Texas.—*S. O. 46, Par. 1, A. G. O.*, February 25, 1884.

THE MEDICAL NEWS *will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.*

Local papers containing reports or news items should be marked.

Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

All communications relating to the editorial department of the NEWS *should be addressed to No. 1004 Walnut Street, Philadelphia.*